**TOSHIBA**
**Leading Innovation** »»»

**Série**
**XV56***
**DIGITAL**

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English

# Safety Precautions

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken to obtain the best results and for safety to be assured. Please read the points below for your own safety. They are of a general nature, intended to help with all electronic consumer products and some points may not apply to the goods you have just purchased.



## Air Circulation

Leave more than 10cm clearance around the television to allow adequate ventilation. This will prevent overheating and possible damage to the television. Dusty places should also be avoided.

## Heat Damage

Damage may occur if the television is left in direct sunlight or near a heater. Avoid places subject to extremely high temperatures or humidity. Place in a location where the temperature remains between 5°C (41°F) min. and 35°C (94°F) max.

## Mains Supply

The mains supply required for this equipment is 220-240v AC 50/60Hz. Never connect to a DC supply or any other power source. DO ensure that the television is not standing on the mains lead.
DO NOT cut off the mains plug from this equipment, this incorporates a special Radio Interference Filter, the removal of which will impair its performance.
IF IN DOUBT PLEASE CONSULT A COMPETENT ELECTRICIAN.

## Do

***DO*** read the operating instructions before you attempt to use the equipment.

***DO*** ensure that all electrical connections (including the mains plug, extension leads and inter-connections between pieces of equipment) are properly made and in accordance with the manufacturers' instructions. Switch off and withdraw the mains plug before making or changing connections.

***DO*** consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

***DO*** be careful with glass panels or doors on equipment.

**DO NOT REMOVE ANY FIXED COVERS AS THIS WILL EXPOSE DANGEROUS AND 'LIVE' PARTS.**

**THE MAINS PLUG IS USED AS A DISCONNECTING DEVICE AND THEREFORE SHOULD BE READILY OPERABLE.**

## Do not

***DO NOT*** obstruct the ventilation openings of the equipment with items such as newspapers, tablecloths, curtains, etc. Overheating will cause damage and shorten the life of the equipment.

***DO NOT*** allow electrical equipment to be exposed to dripping or splashing or objects filled with liquids, such as vases, to be placed on the equipment.

***DO NOT*** place hot objects or naked flame sources, such as lighted candles or nightlights on, or close to equipment. High temperatures can melt plastic and lead to fires.

***DO NOT*** use makeshift stands and NEVER fix legs with wood screws. To ensure complete safety, always fit the manufacturers' approved stand, bracket or legs with the fixings provided according to the instructions.

***DO NOT*** leave equipment switched on when it is unattended, unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch off by withdrawing the plug, make sure your family know how to do this. Special arrangements may need to be made for people with disabilities.

***DO NOT*** continue to operate the equipment if you are in any doubt about it working normally, or it is damaged in any way – switch off, withdraw the mains plug and consult your dealer.

**WARNING** – excessive sound pressure from earphones or headphones can cause hearing loss.

**ABOVE ALL – NEVER let anyone, especially children, push or hit the screen, push anything into holes, slots or any other openings in the case.**

**NEVER guess or take chances with electrical equipment of any kind – it is better to be safe than sorry.**

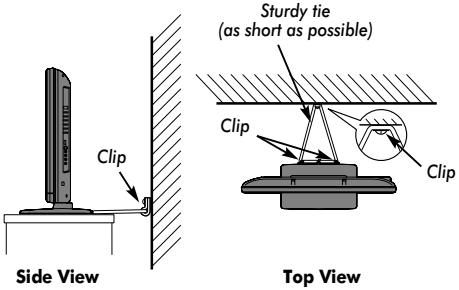
# Installation and important information

## Where to install

Locate the television away from direct sunlight and strong lights, soft, indirect lighting is recommended for comfortable viewing. Use curtains or blinds to prevent direct sunlight falling on the screen.

Place on a sturdy platform, the mounting surface should be flat and steady. It should be secured to the wall with a sturdy tie using the clip on the back of the stand, or secured to the platform using the fixing strap located underneath the table top stand, this will prevent it from falling over.

The LCD display panels are manufactured using an extremely high level of precision technology, however sometimes some parts of the screen may be missing picture elements or have luminous spots. This is not a sign of a malfunction.




Make sure the television is located in a position where it cannot be pushed or hit by objects, as pressure will break or damage the screen, and that small items cannot be inserted into slots or openings in the case.

## Please take note

### EXCLUSION CLAUSE

Toshiba shall under no circumstances be liable for loss and/or damage to the product caused by:

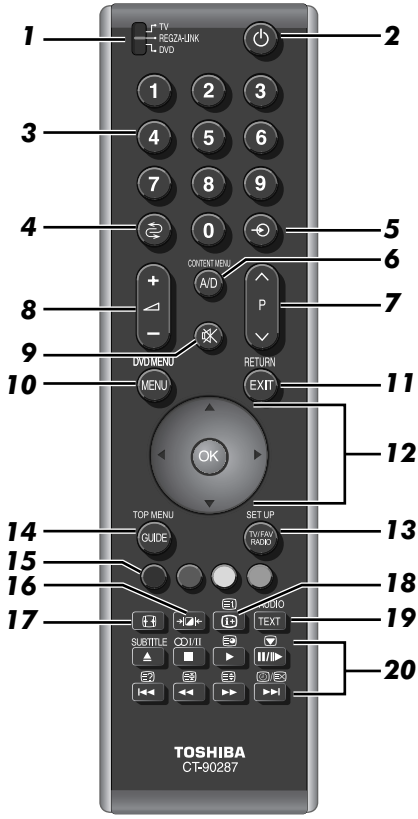
i) fire;
ii) earthquake;
iii) accidental damage;
iv) intentional misuse of the product;
v) use of the product in improper conditions;
vi) loss and/or damage caused to the product whilst in the possession of a third party;
vii) any damage or loss caused as a result of the owner's failure and/or neglect to follow the instructions set out in the owner's manual;
viii) any loss or damage caused directly as a result of misuse or malfunction of the product when used simultaneously with associated equipment;

Furthermore, under no circumstances shall Toshiba be liable for any consequential loss and/or damage including but not limited to the following, loss of profit, interruption of business, the loss of recorded data whether caused during normal operation or misuse of the product.

- If stationary images generated by 4:3 broadcasts, text services, channel identification logos, computer displays, video games, on screen menus, etc. are left on the television screen for any length of time they could become conspicuous, it is always advisable to reduce both the brightness and contrast settings.
- Very long, continuous use of the 4:3 picture on a 16:9 screen may result in some retention of the image at the 4:3 outlines, this is not a defect of the LCD TV and is not covered under the manufacturers warranty. Regular use of other size modes (eg: Superlive) and varying the "side panel" brightness (if available on the model) will prevent permanent retention.

# The remote control

Simple at-a-glance reference of your remote control.




***1*** To select device mode (T/R/D)*

***2*** For On/Standby mode (T/R/D)

***3*** Number buttons (T/R/D)

***4*** To return to the previous programme (T)

***5*** To select external input sources (T/R/D)

***6*** To switch between ATV (analogue television) and DTV (digital television) (T)
To display Content menu (R)

***7*** To change programme positions (T/R)
To change text pages (T)

***8*** To alter the TV volume (T/R/D)

***9*** To mute the TV sound (T/R/D)

***10*** On-screen menus (T)
DVD menus (R/D)

***11*** To exit menus (T)
To return to previous menu (R/D)

***12*** When using menus the arrows move the cursor on the screen up, down, left or right. (OK) to confirm your selection (T/R/D)

***13*** To display TV, Radio and Favourite channel list when in **digital** mode (T)
To access Setup menu (R/D)

***14*** To display the **digital** on-screen Programme Guide (T)
To access Top Menu (R/D)

***15*** Text control buttons (T)
Application control on device (R)

***16*** TV selectable picture preferences (T/R/D)

***17*** TV widescreen viewing (T/R/D)

***18*** To display on-screen information (T/R/D)
To access index page in Text mode (T)

***19*** To call up text services (T)

***20*** **When in TV mode:**

| | |
|---|---|
| /  | Analogue time display |
|  | Picture still |
| I/II | Stereo/bilingual transmissions |
| SUBTITLE | Digital subtitles or TEXT subtitle pages if available |

**When in Text mode:**

| | |
|---|---|
|  | To access sub pages |
|  | To reveal concealed text |
|  | To hold a wanted page |
|  | To enlarge text display size |
| /  | To select a page whilst viewing a normal picture |

**When using the Programme Guide:**

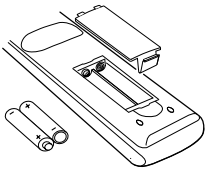
⏮ – 24 hours
⏭ + 24 hours
◀◀ – 1 page
▶▶ + 1 page

**REGZA-LINK or DVD mode:**

press ⏯ to PAUSE/STEP
press ▶ to PLAY
press ◀◀ to REWIND
press ▶▶ to FAST FORWARD
press ⏏ to EJECT
press ■ to STOP
press ⏮ to SKIP-REWIND
press ⏭ to SKIP-FORWARD

* T=TV mode, R=REGZA-LINK mode, D=DVD mode

## Inserting batteries and effective range of the remote



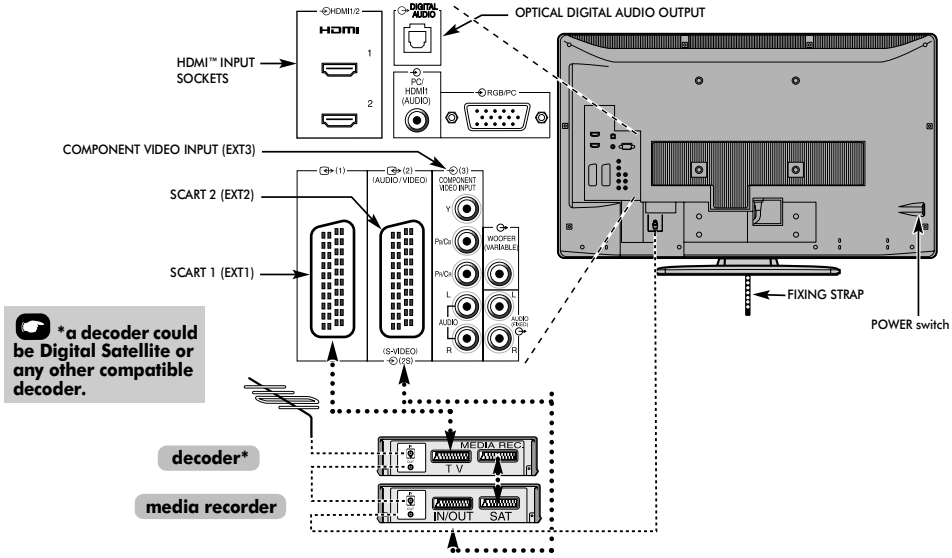
Remove the back cover to reveal the battery compartment and make sure the batteries are inserted the right way round. Suitable battery types for this remote are AAA, IEC R03 1.5V.

Do not combine a used, old battery with a new one or mix battery types. Remove dead batteries immediately to prevent acid from leaking into the battery compartment. Dispose of them in a designated disposal area. **Warning:** batteries must not be exposed to excessive heat such as sunshine, fire or the like.

The performance of the remote control will deteriorate beyond a distance of five metres or outside an angle of 30 degrees from the centre of the television. If the operating range becomes reduced the batteries may need replacing.

# Connecting external equipment

***Before connecting any external equipment, turn off all main power switches. If there is no switch remove the mains plug from the wall socket.***




**Aerial cables:** - - - - - - - - - - - - - - - - - - - - - -

Connect the aerial to the socket on the rear of the television. If you use a decoder* and/or a media recorder it is essential that the aerial cable is connected through the decoder and/or through the media recorder to the television.

**SCART leads:** . . . . . .

Connect the video recorder **IN**/**OUT** socket to the television. Connect the decoder **TV** socket to the television. Connect the media recorder **SAT** socket to the decoder **MEDIA REC**. socket.

Before running **Auto Tuning** put your decoder and media recorder to **Standby**.

The phono sockets alongside the COMPONENT VIDEO INPUT sockets will accept L and R audio signals.

The Digital Audio Output socket enables the connection of a suitable surround sound system.

HDMI™ (High-Definition Multimedia Interface) is for use with a DVD, decoder or electrical equipment with digital audio and video output. It is designed for best performance with 1080i and 1080p high-definition video signals but will also accept and display VGA, SVGA, XGA, WXGA, SXGA, 480i, 480p, 576i, 576p and 720p signals.

PC format signals will also display as shown on page 47.

**NOTE:** Although this television is able to connect to HDMI equipment it is possible that some equipment may not operate correctly.

**A wide variety of external equipment can be connected to the back of the television, therefore the relevant owners manuals for *all* additional equipment must be referred to.**

We recommend *SCART 1* for a decoder and *SCART 2* for a media recorder.

If connecting S-VIDEO equipment, set the **INPUT** for **EXT2**. See *page 35*.

If the television automatically switches over to monitor external equipment, return to normal television by pressing the desired programme position button. To recall external equipment, press ⊖ to select between **DTV**, **EXT1**, **EXT2**, **EXT3**, **HDMI1**, **HDMI2**, **HDMI3**, **PC** or **ATV**.

When the external input mode is selected while viewing DTV mode, the SCART socket does not output video/audio signals.

If ▼ button is pressed while viewing DTV mode, the picture on your screen and the SCART output will become a still picture.

DOLBY DIGITAL PLUS *Manufactured under license from Dolby Laboratories.*

*Dolby and the double-D symbol are registered trademarks of Dolby Laboratories.*

HDMI *HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC.*

# Connecting an HDMI™ or DVI device to the HDMI input

The HDMI input on your television receives digital audio and uncompressed digital video from an HDMI source device, or uncompressed digital video from a DVI (Digital Visual Interface) source device.

This input is designed to accept HDCP (High-Bandwidth Digital-Content Protection) programme material in digital form from EIA/CEA-861-D–compliant [1] consumer electronic devices (such as a set-top box or DVD player with HDMI or DVI output). For acceptable video signal formats, see page 47.

**NOTE:**

- Some early HDMI equipment may not work properly with your latest HDMI TV, due to the adoption of a new standard. Please unplug your HDMI cable first and then try setting **Lip Sync** to "**Off**". Your early HDMI source should operate properly with your television. See page 36.
- Supported Audio format: Linear PCM, sampling rate 32/ 44.1/48kHz.

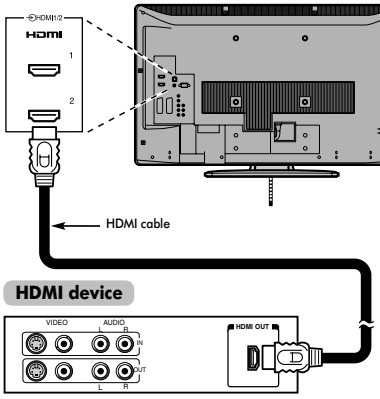
## To connect an HDMI device

Connect an HDMI cable (type A connector) to the HDMI terminal.

For proper operation, it is recommended that you use an HDMI cable with the HDMI Logo (HDMI).

- If your HDMI connection is capable of 1080p and/or your television is capable of refresh rates greater than 60Hz, you will need a Category 2 cable. Conventional HDMI/DVI cable may not work properly with this mode.
- HDMI cable transfers both video and audio. Separate analogue audio cables are not required (see illustration).
- See "HDMI1 Audio" on page 36.

The HDMI3 terminal is located on the side of the television.

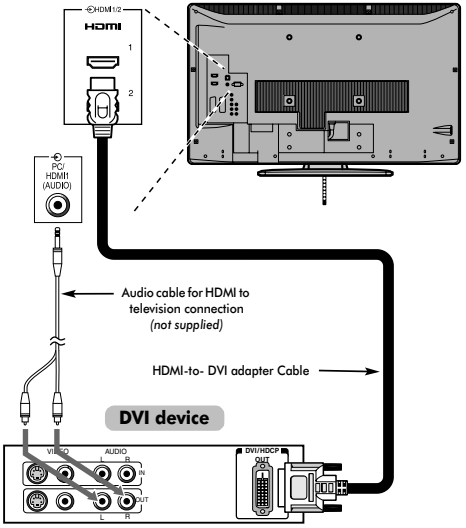



To view the HDMI device video, press the ⊕ button to select HDMI1, HDMI2 or HDMI3 mode.

## To connect a DVI device

Connect an HDMI-to-DVI adapter cable (HDMI type A connector) to the HDMI1 terminal and audio cables to the PC/ HDMI1 (AUDIO) socket (see illustration).

- The recommended HDMI-to-DVI adapter cable length is 6.6 ft (2m).
- An HDMI-to-DVI adapter cable transfers video only. Separate analogue audio cables are required.
- See "HDMI1 Audio" on page 36.




**NOTE:**

To ensure that the HDMI or DVI device is reset properly, it is recommended that you follow these procedures:

- When turning on your electronic components, turn on the television first, and then the HDMI or DVI device.
- When turning off your electronic components, turn off the HDMI or DVI device first, and then the television.

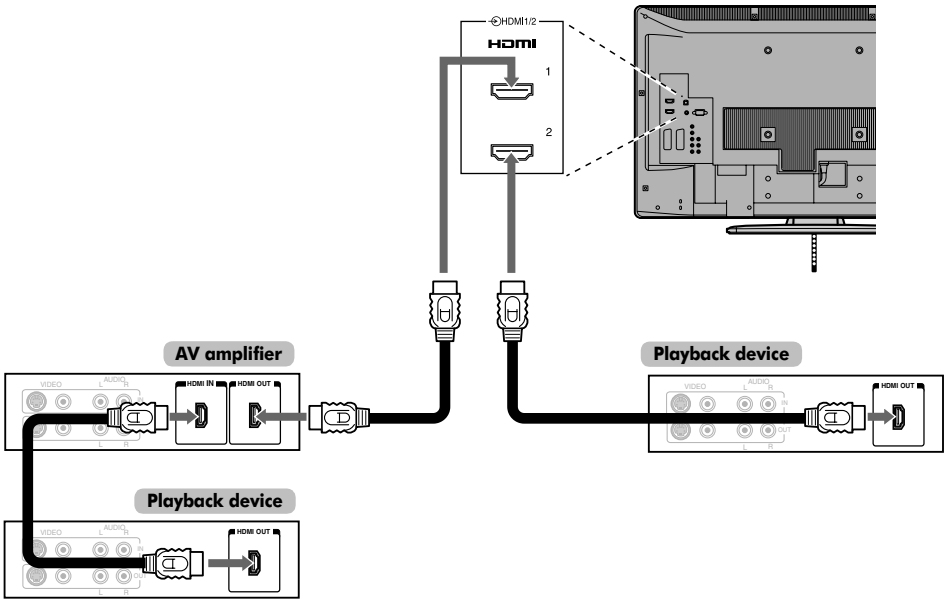
*[1] EIA/CEA-861-D compliance covers the transmission of uncompressed digital video with high-bandwidth digital content protection, which is being standardized for reception of high-definition video signals. Because this is an evolving technology, it is possible that some devices may not operate properly with the television.*

*HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.*

English

# REGZA-LINK connection

You can control the basic functions of connected audio/video devices using the televisions remote control if you connect a REGZA-LINK compatible AV amplifier or playback device. For an explanation of setup and operations, see pages 37–38.




For the setup shown above, you will need three HDMI cables (see page 9).

**NOTE:**

- If several devices are connected, the REGZA-LINK feature may not operate properly.
- For proper operation, it is recommended that you use HDMI cables with the HDMI Logo (HDMI)
- The HDMI3 terminal is located on the side of the television.
- This function is available with one PC and one AV amplifier. It may not operate properly when a PC is connected via an AV amplifier.

**Before controlling the device(s):**

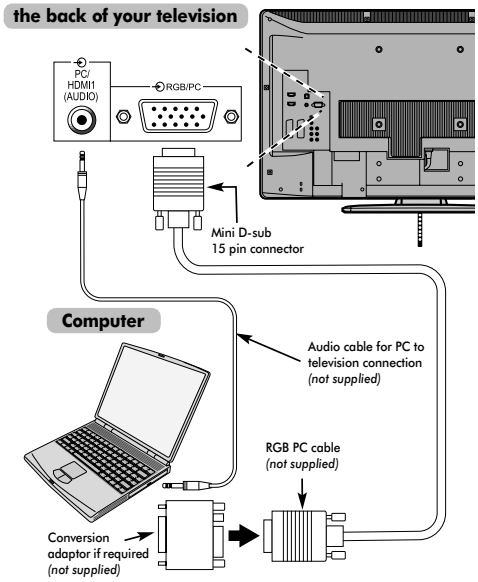
- After completing the above connections, set the REGZA-LINK menu as you desire (see page 37).
- The connected devices must also be set. For details, see the operation manual for each device.
- The REGZA-LINK feature uses CEC technology as regulated by the HDMI standard.
- This feature is limited to models incorporating Toshiba's REGZA-LINK. However, Toshiba is not liable for those operations. Refer to individual instruction manuals for compatibility information.

# Connecting a computer

With either an RGB/PC or an HDMI connection, you can watch your computer's display on the television and hear the sound from the televisions speakers.

## To connect a PC to the RGB/PC terminal

When connecting a PC to the RGB/PC terminal on the television, use an analogue RGB (15-pin) computer cable and a PC audio cable for the PC/HDMI1 (AUDIO) socket. Select **PC** from the **PC/HDMI1 Audio** options in the **AV Connection** menu located in the **SETUP** menu.


the back of your television
PC/ HDMI1 (AUDIO)
RGB/PC
Mini D-sub 15 pin connector
Computer
Audio cable for PC to television connection (not supplied)
RGB PC cable (not supplied)
Conversion adaptor if required (not supplied)

To use a PC, set the monitor output resolution on the PC before connecting it to the television. For acceptable PC signal formats, see page 46.

To display the optimum picture, use the PC setting feature (see page 34).

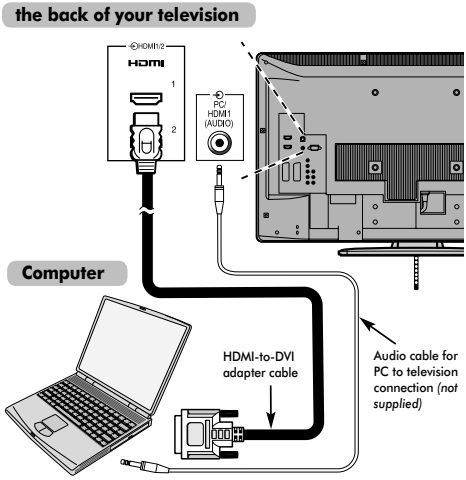
**NOTE:**

- The PC audio input terminal on the television is shared with the HDMI1 analogue audio input terminal (see page 36).
- Some PC models cannot be connected to this television.
- An adapter is not needed for computers with a compatible mini D-sub15-pin terminal.
- Depending on the DVD's title and the specifications of the PC on which you are playing the DVD-Video, some scenes may be skipped or you may not be able to pause during multi-angle scenes.
- A band may appear at the edges of the screen or parts of the picture may be obscured. This is due to scaling of the picture by the set, it is not a malfunction.
- When PC input mode is selected some of the television's features will be unavailable e.g. **Manual Settings** in the **SETUP** menu, **Colour**, **Tint**, **DNR** and **Black/White Level** in the **Picture Settings** menu.
- If connecting a certain PC model with a unique PC signal, the PC signal may not be detected correctly.

## To connect a PC to the HDMI terminal

When connecting a PC to the HDMI terminal on the television, use an HDMI-to-DVI adapter cable and an analogue audio cable.

If connecting a PC with an HDMI terminal, use an HDMI cable (type A connector). A separate analogue cable is not necessary (see page 9).




For acceptable PC and video signal formats, see page 47.

**NOTE:**

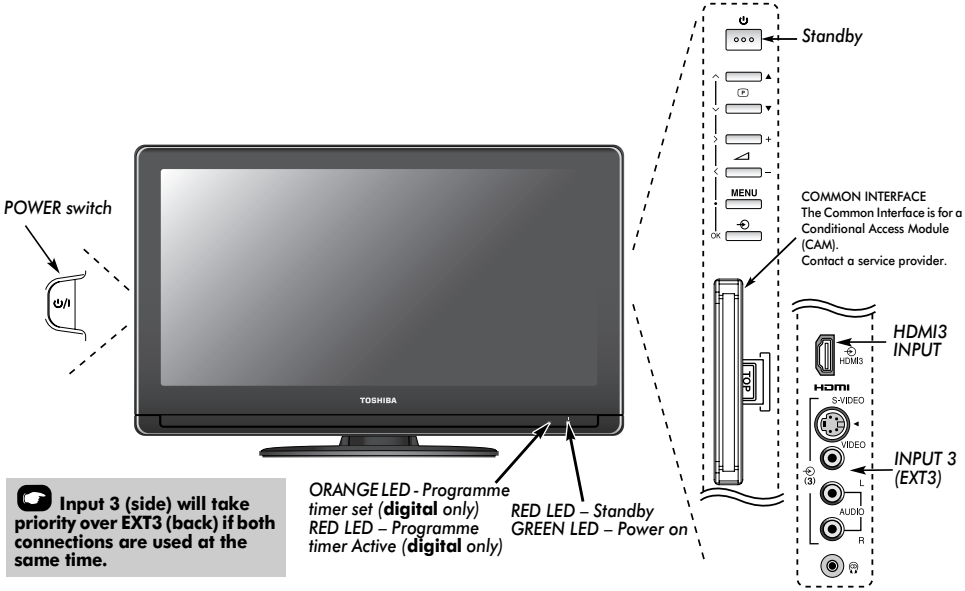
- The edges of the images may be hidden.
- If connecting a certain PC model with a unique PC signal, the PC signal may not be detected correctly.

English

# Controls and input connections

A wide variety of external equipment can be connected to the input sockets on the side of the television. *Whilst all the necessary adjustments and controls for the television are made using the remote control, the buttons on the television may be used for some functions.*






**Input 3 (side) will take priority over EXT3 (back) if both connections are used at the same time.**

## Switching on

If the RED LED is unlit check that the mains plug is connected to the power supply and press the ⏻/I (POWER) button on the left side of the television to switch the television on. If the picture does not appear press ⏻ on the remote control, it may take a few moments. The GREEN LED will be lit.

To put the television into Standby press ⏻ on the remote control. To view the television press ⏻ again. The picture may take a few seconds to appear.

## Using the remote control

Press MENU on the remote control to see the menus.

The menu appears as a list of six topics. As each symbol is selected by pressing ◀ or ▶ on the navigation ring on the remote control, its respective options will appear below.

**NOTE:** The same menu is displayed in DTV (Digital TV) and ATV (Analogue TV) modes; however some items are greyed out in each case.

To use the options, press ▲ and ▼ on the remote control to move up and down through them and OK, ◀ or ▶ to select the required choice. Follow the on-screen instructions. The functions of each menu are described in detail throughout the manual.

## Using the controls and connections

To alter the volume press – ◿ +.

To alter the programme position press ▼ P ▲.

Press **MENU** and <, >, ^ or ˅ to control the sound and picture options.

Press **MENU** twice to finish.

An S-video cable provides better picture performance than a composite video cable. If you connect an S-video cable to **EXT3**, be sure to disconnect the standard (composite) video cable or the picture performance will be unacceptable.

To select an external input, press ⏀ until the appropriate input source is selected as described on *page 35*.

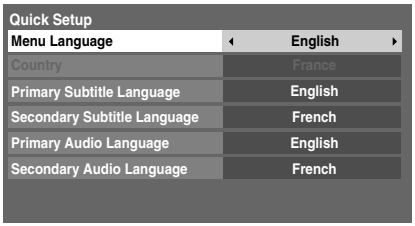
*Please always refer to the owner's manual of the equipment to be connected for full details.*

# Startup Application

Before switching on the television put your decoder and media recorder to **Standby** if they are connected.
To set up the television use the buttons on the remote control as detailed on page 6.

## Quick Setup

**1** Press the ⏻ button. The **Quick Setup** screen will appear. This screen will appear the first time that the television is switched on and each time "**Reset TV**" is executed.




**2** Press ◀ or ▶ to select the menu language **Français** or **English**.

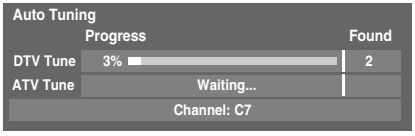
**Country** is fixed to **France** in this model.

**3** Press ▼ to highlight **Primary Subtitle Language, Secondary Subtitle Language, Primary Audio Language** or **Secondary Audio Language** and use ◀ or ▶ to select your preferred language.

**4** Press (OK) to display the **Auto Tuning** startup screen. To execute **Auto Tuning** highlight **Start Scan** and press (OK) again.

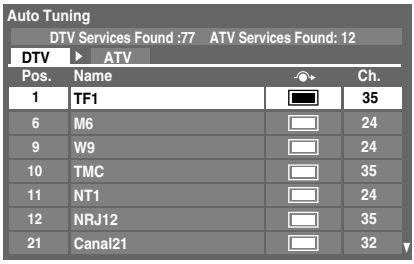
The television will start to search for available ATV and DTV channels. The progress bar will indicate the scan status.

***You must allow the television to complete the search.***

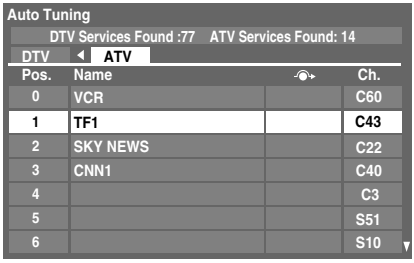



When the search is complete the television will automatically select position one.

The **Auto Tuning** results screen will display the services that are found.




**5** Press ◀ or ▶ to view the **DTV** (digital channel) or **ATV** (analogue channel) lists.




**6** Use ▼ or ▲ to move through the list to select a channel then press (OK) to view.

**NOTE:** The time will be set automatically by transmission but can be advanced or decreased by up to 3 hours using **Local Time Setting**.

**PLEASE NOTE**

The **Quick Setup** menu can also be displayed at any time from the **SETUP** menu.

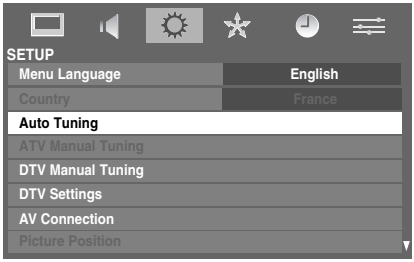
English

## Auto Tuning

**NOTE:** As new services are broadcast it will be necessary to re-tune the television in order to view them.

**Auto Tuning** *will completely re-tune the television and can be used to up date the channel list.*
***It is recommended that Auto Tuning is run periodically to ensure that all new services are added****. All current channels and settings, i.e. favourites and locked channels, will be lost.*

1 Press (MENU) and use ◀ or ▶ to select **SETUP** menu. Use ▼ to highlight **Auto Tuning**. Press (OK).




2 A screen will appear warning that previous programmes and settings will be deleted.

Use ◀ or ▶ to select **DTV and ATV**, **DTV** or **ATV**, then highlight **Start Scan** and press (OK) to continue with the **Auto Tuning**.

The television will start to search for all available DTV and/or ATV services.

***You must allow the television to complete the search.***

When the search is complete the **Auto Tuning** screen will display the services found.

3 Use ▼ or ▲ to move through the list to select a channel then press (OK) to view.

## Auto Channel Update

If the **Auto Channel Update** is set to **On**, when the TV is in standby mode, Digital Tuning is automatically executed and any new channels are stored.

1 Press (MENU), and select **SETUP** menu.

2 Use ▼ to highlight **DTV Settings** and press (OK).

3 Press ▼ to select **Auto Channel Update** and use ◀ or ▶ to select **On**.

## **Analogue** switch-off

This is a **digital** television which is integrated to allow the use of both **digital** and **analogue** services. However, during the lifetime of this set it is very likely that **analogue** services will be switched off to allow for more new **digital** services.

This 'switch-off' will happen in a number of phases, which will be advertised in your area well in advance. It is recommended that at each phase the television is re-tuned to ensure that existing and new **digital** services can be viewed without disruption.

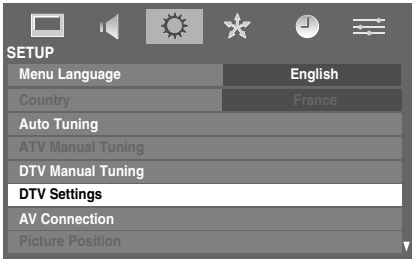
# DTV Settings

## Channels

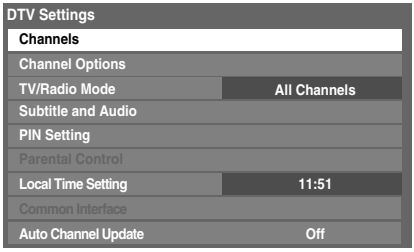
The channel order may be changed to suit your personal preference.

1 Press (MENU), and select **SETUP** menu.

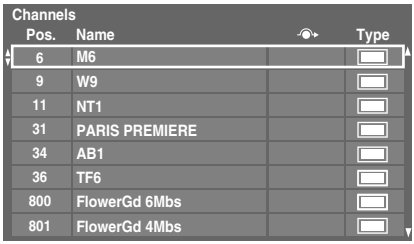
2 Use ▼ to highlight **DTV Settings** and press (OK).




3 Select **Channels** from the **DTV Settings** menu and press (OK).



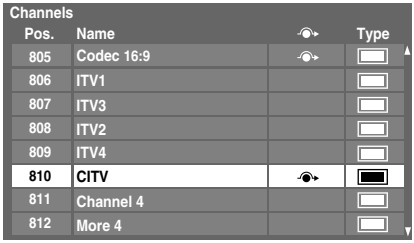

4 With the list of channels showing use ▼ or ▲ to highlight the channel you want to *move* and press (OK).




5 Use ▼ or ▲ to move through the list to your *preferred* position. As you do so the other channels will move to make room.

6 Press (OK) to store your move. Repeat as necessary, then press (EXIT).

The Skip setting for the highlighted channel can be switched between "Set/Not Set" by pressing the **RED** button on the remote control. This feature allows you to set channels that will be skipped when P∨ or P∧ are used to tune. However, these channels will still be available by direct number entry (when tuned a icon will be displayed in the banner to indicate as a skipped channel).

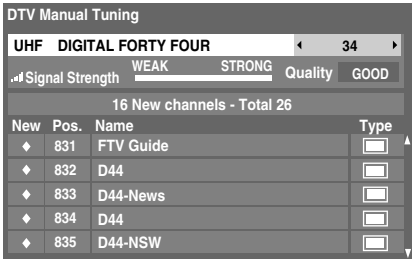



## Manual Tuning

*This feature is available for service engineers or can be used for direct channel entry if the multiplex channel is known.*

1 Select **DTV Manual Tuning** from the **SETUP** menu and press (OK).

2 Enter the multiplex number using the number buttons or use ◀ or ▶ to adjust the number up or down and then press (OK). The television will automatically search for that multiplex.




When the multiplex is found any channels that are not currently in the channel list will be added and the channel information at the top of the screen will be updated.

3 Repeat as necessary. Press (EXIT) to finish.

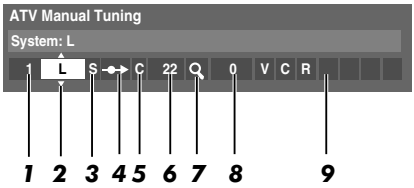
English

# ATV Manual Tuning

## Tuning

The television can be tuned-in manually using **ATV Manual Tuning**. For example: if the television cannot be connected to a media recorder/decoder with a SCART lead or when you want to tune-in a station on another **System**.

*Use ◀ and ▶ to move across the screen and select any of the ATV Manual Tuning options. Then use ▲ or ▼ to adjust the settings.*




**1 Position:**
The number to be pressed on the remote control to tune the channel.

**2 System:**
Specific to certain areas.

**3 Colour System:**
Factory set to Auto, should only be changed if problems are experienced, i.e. NTSC input from external source.

**4 Skip:**
↷ means nothing has been stored or the facility to skip the channel is ON. See page 17.

**5 Channel:**
The channel classification and the channel number on which a station is being broadcast.

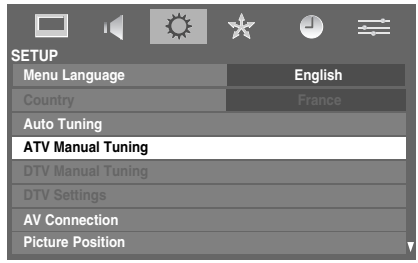
**6 Search:**
Search up and down for a signal.

**7 Fine Tuning:**
Only used if interference/weak signal is experienced. See page 41.

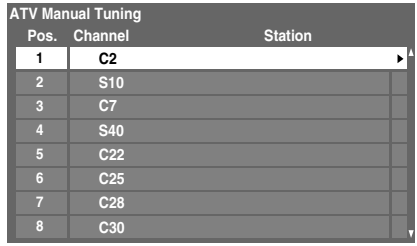
**8 Station:**
Station identification. Use the ▲ or ▼ and ◀ or ▶ buttons to enter up to seven characters.

To allocate a position on the television for a decoder and media recorder: turn the decoder on, insert a pre-recorded film in the media recorder and press PLAY, then manually tune.

**1** Press (MENU) and using ◀ or ▶ select the **SETUP** menu. With ▼ highlight **ATV Manual Tuning** and press (OK) to select.




**2** Use ▲ or ▼ to highlight the position required e.g. we suggest ***Pos. 0*** for a media recorder.




Different **Channel** numbers may be displayed.

**3** Press (OK) to select. If the channel is set to skip, **Skip** must be removed before storing.

**4** Press ▶ to select **System** and use ▲ or ▼ to change if required.

**5** Then press ▶ to select **Search**.

**6** Press ▲ or ▼ to begin the search. The search symbol will flash.

**7** Each signal will show on the television, if it is not your media recorder, press ▲ or ▼ again to restart the search.

**8** When your media recorder signal is found, press ▶ to move along to **Station**. With ▲, ▼, ◀ and ▶ put in the required characters, e.g. **VCR**.

**9** Press (OK) to store.

**10** Repeat for each ***position*** you want to tune or, press (MENU) to return to the list of channels and select the next number to tune.

**11** Press (EXIT) when you have finished.

**12** To name external equipment, e.g. DVD on EXT2, press ⊖ to select ⊖2, then select **Manual Settings** from the **SETUP** menu.

**13** Press ▶ to select **Label** then using ▲, ▼, ◀ and ▶ put in the required characters.

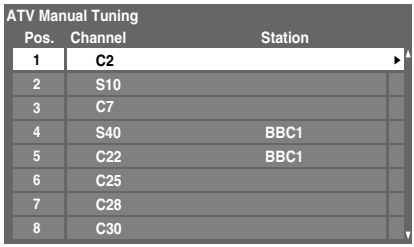
**PLEASE NOTE**

This television has direct channel entry if the channel numbers are known.
Select the **ATV Manual Tuning** screen in ***Step 3***. Enter the **Position number**, the **System**, then **C** for standard (terrestrial) channels or **S** for cable channels and the **Channel** number. Press (OK) to store.

## Skip

*To prevent certain channels from being viewed, positions can be skipped. The remote control must be removed as the channels will still be available using the number buttons. Channels can then be watched as normal using the controls on the television, but the television will not show the skipped channel positions.*

**1** Select **ATV Manual Tuning** from the **SETUP** menu.




**2** Use ▲ or ▼ to highlight the position to be skipped and press (OK) to select.

**3** Press ▶ to select **Skip**.

**4** Use ▲ or ▼ to turn **Skip** on.
Press (OK).

👁 on the screen indicates a skipped position.

**5** Press (MENU) and repeat from ***Step 2*** or press (EXIT).

Each position has to be *individually* selected. To turn **Skip** off, repeat the procedure for each position.

Skipped positions ***cannot*** be selected by **P**∧ and **P**∨ or by the controls on the television, but ***can*** still be accessed by the number buttons on the remote control.

English

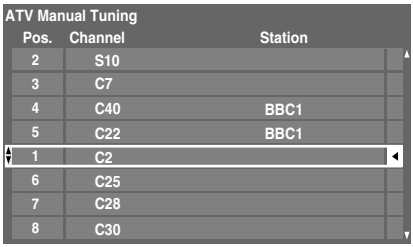
## Sorting positions

*Channels may be moved and stored to the position of your choice.*

1 Select **ATV Manual Tuning** from the **SETUP** menu.

2 With the list of channels now showing use ▲ or ▼ to highlight the channel you want to *move* and press ▶.

The selected channel will be moved to the right of the screen.




3 Use ▲ or ▼ to move through the list to your *preferred* position. As you do so the other channels will move to make room.

4 Press ◀ to store your move.

Repeat as necessary, then press (EXIT).

# General controls

## Selecting positions

To select a position use the numbered buttons on the remote control.

Positions can also be selected using **P∧** and **P∨**.

To revert to the previous position press ⇄.

To display on-screen information *i.e.* position, input mode or stereo/mono signal, press i+. Press again to cancel.

## The Time Display – **analogue** only

*The time display facility allows the current (text service) time to be seen on the television screen.*

Press 🕘/TEXT whilst watching a normal television broadcast to see a time display from the broadcaster. It will remain on screen for about 5 seconds.

**NOTE:** This display may not be available in some cases.

## Stereo and Bilingual transmissions

### For ATV programmes

*If stereo or dual language broadcasts are transmitted the word Stereo or Dual will appear on the screen each time positions are changed, disappearing after a few seconds. If the broadcast is not in stereo the word Mono will appear.*

**Stereo...** Press ◯I/II to select **Stereo** or **Mono**.

**Bilingual...** Bilingual transmissions are rare. If they are transmitted the word **Dual** will display. Choose the required programme number and if the word **Dual** appears press ◯I/II to select **Dual 1**, **Dual 2** or **Mono**.

### For DTV programmes

For stereo or dual mono broadcasts, press ◯I/II and use ◀ or ▶ to select settings.

| Mode Display | Pressing ▶ |
|---|---|
| ◯◯ Stereo | Stereo ⟶ Left ⟶ Right |
| ●○ Dual mono | Dual 1 ⟶ Dual 2 ⟶ Dual |
| ⬭ Mono | – |
| ◯◯ Surround | – |

For multi-audio track broadcasts, press ◯I/II repeatedly to change the audio language (see 'Audio language' on page 32).

# Sound controls

## Volume controls and mute sound

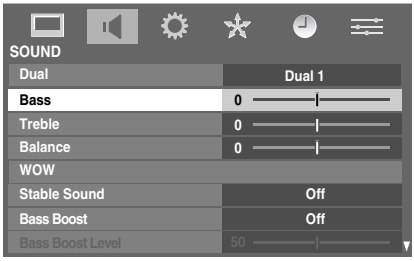
**Volume**
Press 🔊 or 🔉 to adjust the volume.

**Sound Mute**
Press 🔇 once to turn the sound off and again to cancel.

## Bass, Treble and Balance

*The sound controls are accessible in* ***digital*** *and* ***analogue*** *modes.*

1 Press MENU and ◀ or ▶ to select **SOUND**.




2 Press ▼ to highlight **Bass**, **Treble** or **Balance** and ◀ or ▶ to change the setting.

## Bass Boost

**Bass Boost** *enhances the depth of the sound on the TV speakers. The difference will only be noticeable on sound with a strong bass.*

1 In the **SOUND** menu press ▼ to highlight **Bass Boost**. Use ◀ or ▶ to select **On**.

2 Then press ▼ to highlight **Bass Boost Level** and using ◀ or ▶ adjust to suit your preference.

English

When an active Super Woofer is connected to the Woofer Out connection on the back of the television, select **AV Connection** in the **SETUP** menu, press ▼ to highlight **Woofer** and use ◀ or ▶ to select **External**. (See 'Input Selection and AV Connections' *section*).

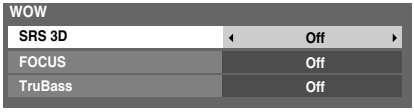
## SRS WOW® sound effects

***SRS WOW**® is a suite of audio effects which use the stereo signals being broadcast to produce enhanced sound from the television's speakers. If mono sound is broadcast FOCUS and TruBass will be available.*

***SRS 3D**® gives a rich sound experience, **SRS FOCUS**® concentrates the sound and gives the effect of it coming from the centre of the television, **SRS TruBass**® enhances the lower bass frequencies.*



1. Press (MENU) and select the **SOUND** menu.
2. Use ▲ or ▼ to highlight **WOW** then press (OK).




3. Press ▼ to highlight **SRS 3D** and using ◀ or ▶ select between **On** or **Off**.
4. Then press ▼ to highlight **FOCUS** and press ◀ or ▶ to select between **On** or **Off**.
5. Highlight **TruBass** and use ◀ or ▶ to select **Off**, **Low** or **High** to suit your preference.

## Dual

*If a programme or film is being broadcast with a soundtrack in more than one language, the **DUAL** feature allows selection between them.*

1. Press (MENU) and select the **SOUND** menu.
2. Use ▼ to highlight **Dual** then press ◀ or ▶ to choose between **Dual 1** or **Dual 2**.

## Stable Sound®

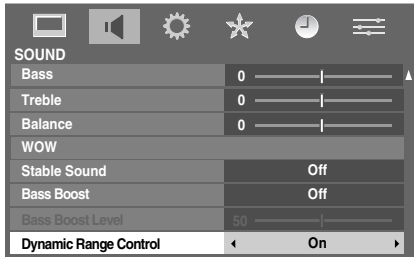
*The **Stable Sound** feature limits high volume levels on the TV speakers, preventing the extreme changes in volume that can occur when channels are changed or a programme switches to a commercial.*

1. Select the **SOUND** menu.
2. Use ▼ to highlight **Stable Sound** then press ◀ or ▶ to select **On** or **Off**.

## Dynamic Range Control

*This feature allows control of audio compression for some digital TV programmes except MPEG-1 and MPEG-2 audio.*

1. Select the **SOUND** menu.
2. Use ▼ to highlight **Dynamic Range Control** then press ◀ or ▶ to select **On** or **Off**.




**NOTE:** If the **Stable Sound** and **Dynamic Range Control** features are both set to **On**, each effect may not be noticeable.

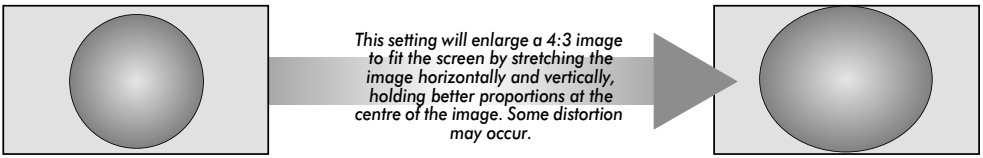
SRS(●) WOW *WOW, SRS and (●) symbol are trademarks of SRS Labs, Inc. WOW technology is incorporated under license from SRS Labs, Inc.*

## Widescreen viewing

Depending on the type of broadcast being transmitted, programmes can be viewed in a number of formats. Press ⛶ repeatedly to select between **Exact Scan, Native, Wide, Super Live 2, Cinema 2, 4:3, Super Live 1, Cinema 1, Subtitle** and **14:9**.

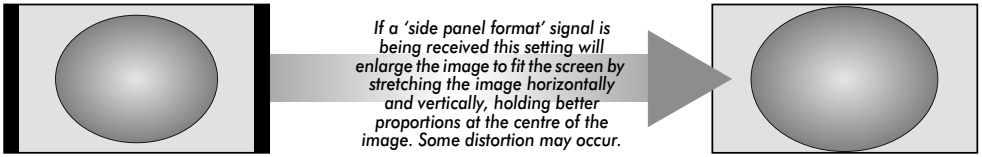


### *SUPER LIVE 1*



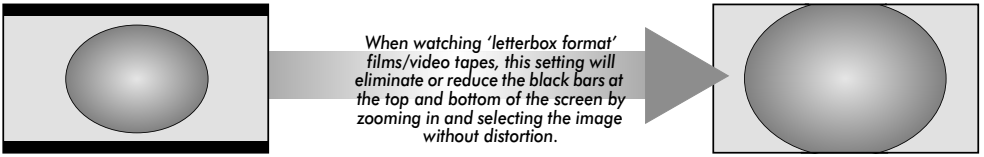
*This setting will enlarge a 4:3 image to fit the screen by stretching the image horizontally and vertically, holding better proportions at the centre of the image. Some distortion may occur.*

### *SUPER LIVE 2*



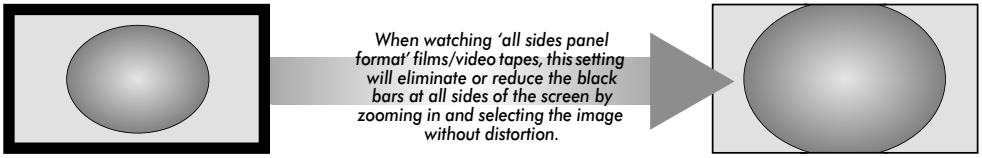
*If a 'side panel format' signal is being received this setting will enlarge the image to fit the screen by stretching the image horizontally and vertically, holding better proportions at the centre of the image. Some distortion may occur.*

### *CINEMA 1*



*When watching 'letterbox format' films/video tapes, this setting will eliminate or reduce the black bars at the top and bottom of the screen by zooming in and selecting the image without distortion.*

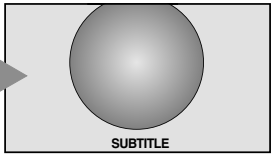
### *CINEMA 2*



*When watching 'all sides panel format' films/video tapes, this setting will eliminate or reduce the black bars at all sides of the screen by zooming in and selecting the image without distortion.*

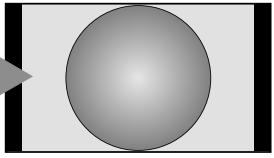
### *SUBTITLE*

*When subtitles are included on a letterbox format broadcast, this setting will raise the picture to ensure that all the text is displayed.*



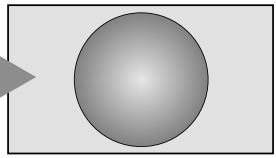

### *14:9*

*Use this setting when watching a 14:9 broadcast.*



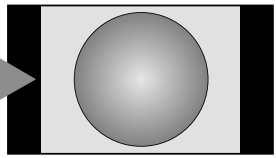
**WIDE**

*Use this setting when watching a widescreen DVD, widescreen video tape or a 16:9 broadcast (when available). Due to the range of widescreen formats (16:9, 14:9, 20:9 etc.) black bars may be visible on the top and bottom of the screen.*



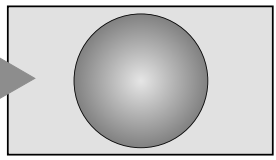
**4:3**

*Use this setting to view a true 4:3 broadcast.*



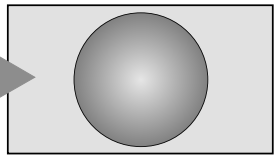
**EXACT SCAN**

*Use this setting when watching a 1080 source, it will display the image as transmitted without scaling or cropping the picture. This option is only available when watching a 1080 source.*



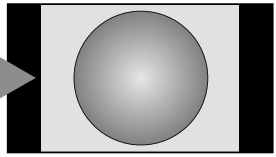
**NATIVE**

*When using a PC connected via HDMI this setting will show the picture without over scan, i.e. WYSIWYG. This option is only available when watching video signal source via HDMI.*



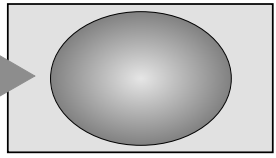
**PC NORMAL**

*When using a PC connected via HDMI or PC terminal, this setting will show the picture without over scan, i.e. WYSIWYG. This option is only available when watching PC signal source via HDMI or PC terminal.*



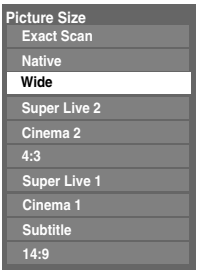
**PC WIDE**

*When using a PC connected via HDMI or PC terminal, this setting will show the picture without over scan and side panel. This option is only available when watching PC signal source via HDMI or PC terminal.*

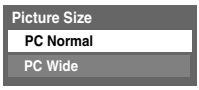


Press ⊞ to display the list of available widescreen formats. Use ▲ and ▼ to highlight the required format and OK to select.

*AV format*




*PC format*




*Using the special functions to change the size of the displayed image (i.e. changing the height/width ratio) for the purposes of public display or commercial gain may infringe on copyright laws.*

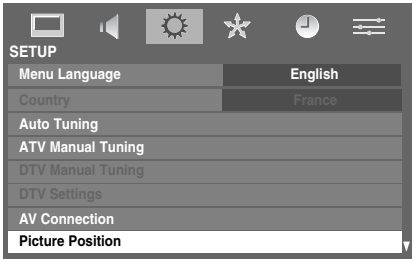
# Picture controls

Most of the picture controls and functions are available in both **digital** and **analogue** modes. *PLEASE NOTE: features not available will be greyed out.*

## Picture Position

*The picture position may be adjusted to suit personal preference and can be particularly useful for external inputs.*

1 In the **SETUP** menu press ▼ until **Picture Position** is highlighted.

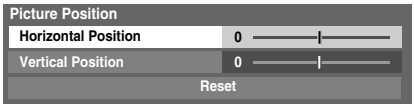



2 Press OK to view the options available for the picture format that has been selected.

3 Press ▲ and ▼ to select an option, then ◀ or ▶ to adjust the settings.

The options alter depending on currently selected widescreen format and the input signal.

In **Cinema 2**:

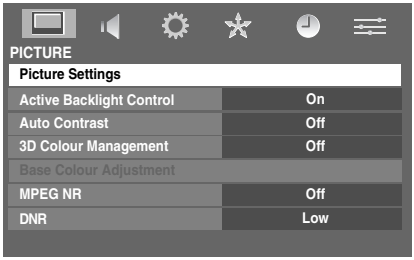



To return to the original factory settings select **Reset** in the **Picture Position** menu and press OK.

## Backlight

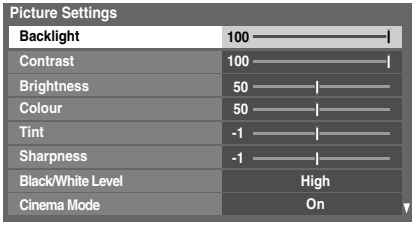
*Adjusting the* **Backlight** *can improve the clarity of the screen when viewing.*

1 In the **PICTURE** menu press ▼ to select **Picture Settings**, then press OK.




2 In the **Picture Settings** menu press ▼ to select **Backlight**.

3 Press ◀ or ▶ to adjust.




English

## Picture preferences

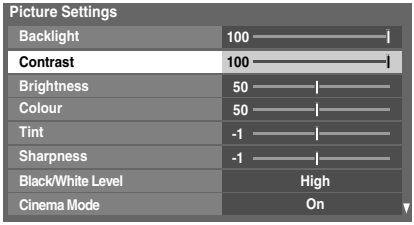
*This television offers the choice of personalising the picture style. Press →|◪|← to view the different styles available:*

**Dynamic**, **Standard**, **Movie**, **Game*** *and* **PC** *(or* **PC Fine***)*** *are preset options and affect many features/settings within the television. You can customise current picture mode settings as desired. For example, while selecting "***Dynamic***," if you change the following items, such as* **Backlight**, **Contrast**, **Brightness**, **Colour**, **Tint**, **Sharpness**, **Black/White Level**, **Cinema Mode** *and* **Colour Temperature**, *your new setting is stored as "***User Setting***."*

* **Game** mode is available in external input mode (other than aerial input). When you select Game mode, suitable widescreen formats will be selected.

** **PC** mode is available in RGB/PC input mode or HDMI input mode.
**PC Fine** mode is only available when a Toshiba PC (REGZA-LINK type) is connected and **Enable REGZA-LINK** is set to **On** (see page 37).

1 Select **Picture Settings** from the **PICTURE** menu.

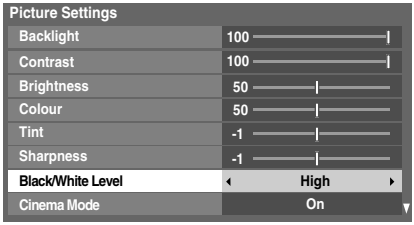



2 Use ◀ or ▶ to adjust the **Contrast**, **Brightness**, **Colour**, **Tint** and **Sharpness**.

## Black/White Level

**Black/White Level** *increases the strength of dark areas of the picture which improves the definition.*

1 In the **Picture Settings** menu press ▼ until **Black/White Level** is highlighted.




2 Press ◀ or ▶ to select **Low**, **Middle**, **High** or **Off**. The effect depends on the broadcast and is most noticeable on dark colours.

## Cinema Mode

*If there are lines or jagged edges in the film or programme being viewed, selecting* **Cinema Mode** *can help correct this by smoothing out the picture.*

1 In the **Picture Settings** menu press ▼ to select **Cinema Mode**.

2 Press ◀ or ▶ to select **On** or **Off**.

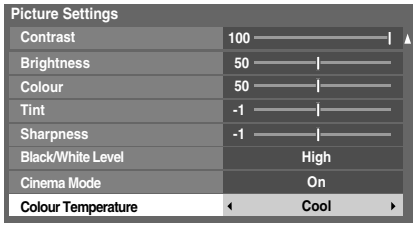
**NOTE:** When a DVD with subtitles is being played this mode may not work correctly.

## Colour Temperature

**Colour Temperature** *increases the 'warmth' or 'coolness' of the picture by increasing the red or blue tint.*

1 In the **Picture Settings** menu press ▼ until **Colour Temperature** is highlighted and press (OK).

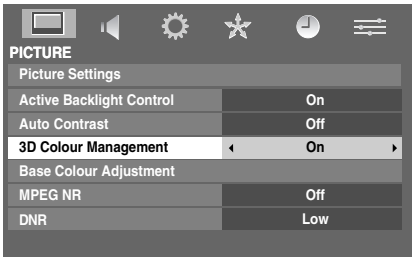
2 Press ◀ or ▶ to select **Cool, Natural** or **Warm** to suit your preference.



## 3D Colour Management

*When* **3D Colour Management** *is set to* **On** *it allows the 'Base Colour Adjustment' feature to become available.*

1. In the **PICTURE** menu press ▼ to select **3D Colour Management**.




2. Press ◀ or ▶ to select **On** or **Off**.

## Base Colour Adjustment

*The* **Base Colour Adjustment** *feature allows the adjustment of individual colours to suit personal preference. This can be useful when using an external source.*

1. In the **PICTURE** menu press ▼ to select **Base Colour Adjustment**, then press OK.

2. Press ▲ or ▼ to select an option, then ▶ to move to the adjustment window.

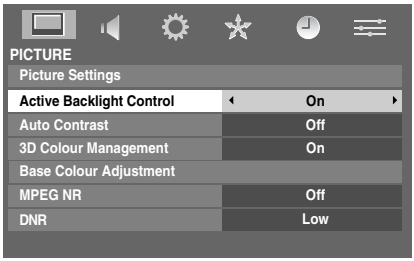
3. Press ◀ or ▶ to select **Hue**, **Saturation** or **Brightness**, then press ▲ or ▼ to adjust the settings as required.

To return to the original factory settings select **Reset** and press OK.

## Active Backlight Control

*When* **Active Backlight Control** *is activated it will automatically optimise the backlighting levels for dark scenes.*

1. In the **PICTURE** menu press ▼ to select **Active Backlight Control**.




2. Press ◀ or ▶ to select **On** or **Off**.

## Auto Contrast

*When* **Auto Contrast** *is activated it will automatically optimise the backlighting levels to suit ambient light conditions.*

1. In the **PICTURE** menu press ▼ to select **Auto Contrast**.

2. Press ◀ or ▶ to select **On** or **Off**.

## MPEG NR – Noise Reduction

*When watching a DVD the compression may cause some words or picture elements to become distorted or pixelated. Using the* **MPEG NR** *feature reduces this effect by smoothing out the edges.*

1. Select **MPEG NR** from the **PICTURE** menu. Use ◀ or ▶ to select **Low**, **Middle**, **High** or **Off** to suit your preference.

## DNR – Digital Noise Reduction

**DNR** *enables you to 'soften' the screen representation of a weak signal to reduce the noise effect.*

1. Select **DNR** from the **PICTURE** menu.

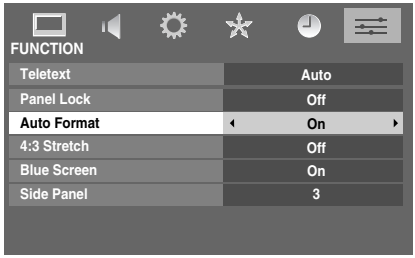
2. Use ◀ or ▶ to select **Low**, **Middle**, **High**, **Auto** or **Off**. The differences may not always be noticeable (for the best result use lower settings as picture quality can be lost if the setting is too high).

English

## Automatic Format (Widescreen)

*When this television receives a true Widescreen picture and* **Auto format** *is* **On***, it will automatically be displayed in Widescreen format, irrespective of the television's previous setting.*

1 Press MENU and ◀ or ▶ to select the **FUNCTION** menu.




2 Press ▼ to highlight **Auto Format**, then ◀ or ▶ to select **On** or **Off**.

## 4:3 Stretch

*When* **4:3 Stretch** *is activated the size switching system changes 4:3 programmes into full screen picture.*

1 In the **FUNCTION** menu press ▼ to highlight **4:3 Stretch**.

2 Press ◀ or ▶ to select **On** or **Off**.

## Blue Screen

*When* **Blue Screen** *is selected the screen will turn blue and the sound will be muted on analogue channels and external input modes (except PC) when no signal is received.*

1 In the **FUNCTION** menu press ▼ to highlight **Blue Screen**.

2 Press ◀ or ▶ to select **On** or **Off**.

## Side panel adjustment

*The* **Side Panel** *feature lightens or darkens the band on each side of the screen when in 4:3 or 14:9 format. This helps prevent image retention of the band and can also make viewing in bright or dark conditions more comfortable.*

1 In the **FUNCTION** menu press ▼ until **Side Panel** is highlighted.

2 Press ◀ or ▶ to adjust.

## Picture still

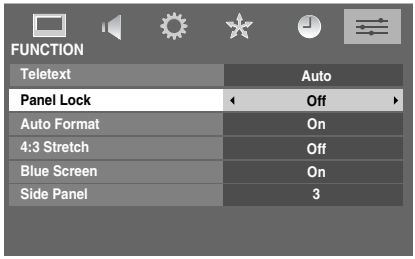
*This feature is used to hold a still image on the screen.*

Press ▼ to hold an image on the screen, press ▼ again to cancel.

# Panel lock

***Panel lock*** *disables the buttons on the television. All buttons on the remote control can still be used.*

1 From the **FUNCTION** menu select **Panel Lock** and choose **On** or **Off** using ◀ or ▶.



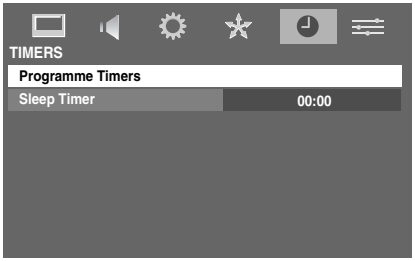

When **Panel Lock** is **On**, a reminder will appear when the buttons on the television are pressed. **If the standby button is pressed the television will switch off and can only be brought out of standby by using the remote control.**

# The timers

## Programme Timers – **digital** only

*This feature will set the television to go to a specific channel at a certain time. It can be used to view a particular programme, or by setting the mode to daily or weekly, can be used to view a series of programmes.*

1 Press MENU and ◀ or ▶ to select the **TIMERS** menu.




2 Press ▼ to select **Programme Timers**, then press OK.

3 Press ▼ if necessary to select an open timer position, then press OK. The **SET TIMER** menu will now appear on screen.

4 Press ▲ and ▼ to go through the list adding the details of the programme by using the number buttons and ◀ and ▶ to make selections.

5 When all the details have been entered press OK to save the timer.

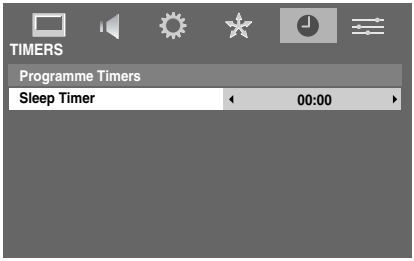
The ORANGE/RED programme timer indicator on the front of the television will be lit (see page 43 for details).

**PLEASE NOTE:** When a timed programme is about to start, an information screen will appear offering the option of watching or cancelling the programme. The menus and other channels will not be available during the timed programme unless the programme timer is cancelled. The programme timer you set is not performed when the TV is turned off with the ⏻/I POWER switch.

## Sleep Timer

*The television can be set to turn itself **Off** after a certain length of time.*

1 Press MENU and ◀ or ▶ to select the **TIMERS** menu.




2 Press ▼ to select **Sleep Timer**. Use the number buttons to set the required time. For example, to switch the television off in one and a half hours enter 01:30, or press ▶/◀ to increase/decrease in steps of 10 minutes.

3 Press EXIT to finish.

4 To cancel the **Sleep Timer**, enter zero in the above setting.

English

# Digital on-screen information and Programme Guide

When viewing in **digital** mode, the on-screen information and programme guide provide access to programme details for all available channels.

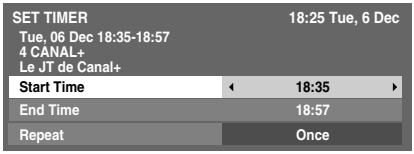
## Information

English

1 Press (i+), the information screen will appear giving details of the channel and programme currently being viewed.

2 Press ▲ or ▼ to select the "**Now**", "**Next**" or "**Also**" information guide.

3 To record the following programme, select "**Next**" and, press (OK). The **SET TIMER** screen will appear.




4 The details of the programme will have been added to the timer. Press (OK) to save.

To indicate that a timer has been set, a clock icon will be displayed in the **Next** and **Also** fields of the information screen.

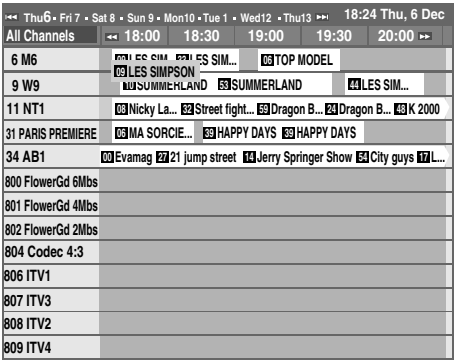
5 Press ▼ to select **Also**. Details of programmes that have started on other channels will be provided. Use ◀ or ▶ to change the display contents.

### On-screen Information icons

| | Icon | Description |
|---|---|---|
| Service info | | Service type (TV, Radio) |
| | | Skip |
| Audio info | | Mono |
| | | Stereo |
| | | Dual mono |
| | | Surround |
| Audio/Subtitle info | | Hard of Hearing |
| Event info | HD, SD | Video format (HD, SD) |
| | 16:9, 4:3 | Video Aspect |
| | | Teletext |
| | | Subtitle (Single, Multi) |
| | | Multi-audio track |
| | 0, 4 – 18 | Parental rating |
| | | Encrypted |
| Timer info | | Timer status |

## Guide

1 Select the on-screen guide by pressing **GUIDE**, the guide screen will appear highlighting details of the channel and programme currently being viewed. This may take a few moments to appear.




You can switch the time scale to 1.25 or 2.5 hours by pressing the **RED** button.

**NOTE:** Only channels selected by the TV/Radio Mode are displayed. Skipped channels are not displayed.

2 Press ◀ or ▶ for information on other programmes scheduled for the channel selected.

3 For details of other programmes currently available, press ▲ and ▼ to scroll up and down the channel list. As channels are selected details of the programme currently being broadcast will appear. Press ◀ or ▶ to view information for future programmes.

4 For information on a highlighted programme press i+.

**NOTE:** In order for the recording operation to work properly, the media recorder must be set to the same time as the TV. Regarding the process for recording, please refer to the owner's manual of the recording equipment.

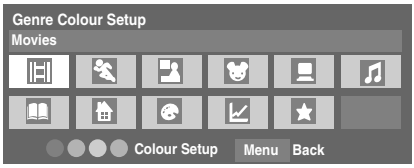
5 Press ⏭ to move the **Guide** forward by 24 hours, press ⏮ to go back. Pressing ⏩ or ⏪ will move the **Guide** forwards or backwards a page at a time.

Press P∨ to advance to the next page, press P∧ to go back to the previous page.

## Genre selection/searching

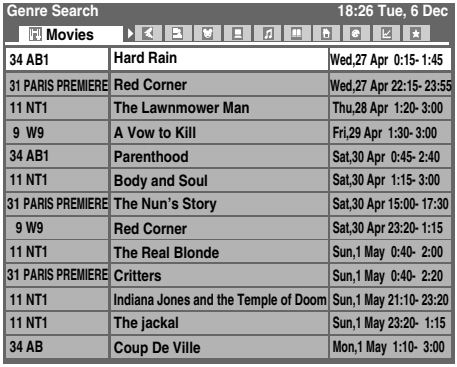
*From the guide screen, you can use the genre selection and search features.*

1 Press the **YELLOW** button from the guide screen. The **Genre Colour Setup** window will appear.




2 With the focus on a particular genre, press the desired colour key to assign. Four colours will be available to set. Press MENU to go back to the guide screen.

3 Press the **GREEN** button to access the **Genre Search** screen.


Genre Search
18:26 Tue, 6 Dec
Movies
34 AB1 Hard Rain Wed,27 Apr 0:15- 1:45
31 PARIS PREMIERE Red Corner Wed,27 Apr 22:15- 23:55
11 NT1 The Lawnmower Man Thu,28 Apr 1:20- 3:00
9 W9 A Vow to Kill Fri,29 Apr 1:30- 3:00
34 AB1 Parenthood Sat,30 Apr 0:45- 2:40
11 NT1 Body and Soul Sat,30 Apr 1:15- 3:00
31 PARIS PREMIERE The Nun's Story Sat,30 Apr 15:00- 17:30
9 W9 Red Corner Sat,30 Apr 23:20- 1:15
11 NT1 The Real Blonde Sun,1 May 0:40- 2:00
31 PARIS PREMIERE Critters Sun,1 May 0:40- 2:20
11 NT1 Indiana Jones and the Temple of Doom Sun,1 May 21:10- 23:20
11 NT1 The jackal Sun,1 May 23:20- 1:15
34 AB Coup De Ville Mon,1 May 1:10- 3:00

4 Press ◀ or ▶ to select the genre. Programmes listed will change for the new genre. Press ▲ or ▼ to highlight a particular programme.

5 When a current programme is selected, pressing OK will tune to that programme. When a future programme is selected, pressing OK will open the **SET TIMER** menu.

6 For information on a highlighted programme press i+.

7 To exit the **Genre Search** and go back to the guide screen, press the **GREEN** button.

English

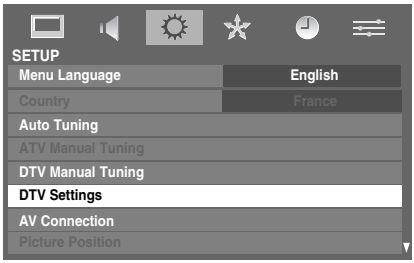
# Digital settings – parental control

In order to prevent viewing of unsuitable films and programmes, channels and menus can be locked. These can then only be accessed with a security code PIN when in **digital** mode.

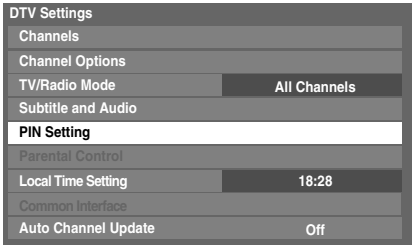
## Setting the PIN

1 Press (MENU) and ▶ to select the **SETUP** menu.

2 Use ▼ to select **DTV Settings** then press (OK).




3 Press ▼ to highlight **PIN Setting** then press (OK).




4 Using the number buttons enter a four digit number. Once entered you will be prompted to confirm by entering again.

The PIN number is now set.

If the PIN code has been set, when **Auto Tune** and **Reset TV** are executed, entering the PIN will be necessary.

## Parental Setup

*The Parental Control feature allows you to block programmes according to their rating levels. If a PIN has been set, you will need to enter it before adjusting the level.*

1 In the **Parental Control** menu press ▼ to select **Parental Setup**.

2 Use ◀ or ▶ to choose options (**None** or age settings (4-18)).

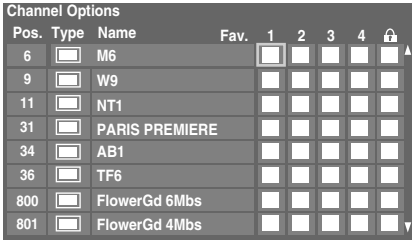
To view blocked programmes, enter the PIN. To reactivate the Parental Control, turn the TV off and then on again.

# Digital settings – Channel Options

## Selecting favourite channels

**Favourite Channels** *creates a list of the* **digital** *channels that are watched most. Four lists can be created, these can be a mixture of television and radio channels.*

1 From the **DTV Settings** menu press ▼ to select **Channel Options** and press (OK).

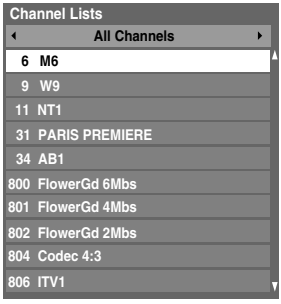



2 Use ▲▼◀▶ to go through the list of channels. Press (OK) to select the ones required. A tick will appear in the box as they are selected.

To select all channels in the highlighted column, press the **RED** button. To erase all channels in the highlighted column, press the **GREEN** button.

## Favourite Channel Lists

1 Press the **TV/FAV RADIO** button. The **Channel Lists** will appear. Press ◀ or ▶ to select TV/Radio Mode and Favourites 1-4. The number of favourites available depends on how many lists have been created.




2 Press ▲ or ▼ to highlight a channel and press (OK) to watch.

## Locking channels

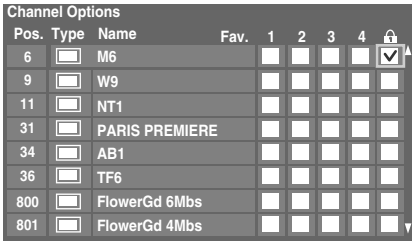
**Locking Channels** *stops the viewing of* **digital** *channels, they can only be accessed by entering the PIN.*

1 From the **DTV Settings** menu press ▼ to select **Channel Options** and press (OK).

2 Press ▶ repeatedly to select the Locked Channel list.

3 Use ▲ and ▼ to go through the list of channels. Press (OK) to select the ones required. A tick will appear in the box.

If a PIN has already been set, PIN entry will be required to set the locked channels.




4 Press (EXIT).

5 From this point on, when any of the channels in the **Locked Channel** list are selected the PIN must be entered before they can be accessed.

## TV/Radio Mode

*This feature determines the channel list profile that will be applied to regular channel changing, the programme guide, and the* ***TV/FAV RADIO*** *button in digital mode.*

1 From the **DTV Settings** menu press ▲ or ▼ to select **TV/Radio Mode**.

2 Use ◀ or ▶ to select **All Channels**, **TV** or **RADIO**.

**NOTE:** When setting to **TV** or **RADIO**, using the **P∨** and **P∧** button will now only access that particular type of channel, however channels that are not in the currently selected list can still be selected by direct position number entry.

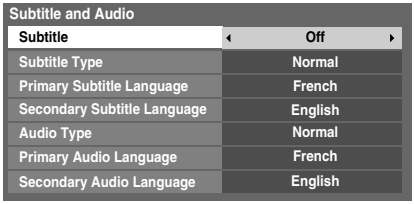
English

# Digital settings – other settings

## Subtitles

*In digital mode, this feature will show subtitles on the screen in the selected language provided they are being broadcast.*

1. In the **SETUP** menu press ▼ to select **DTV Settings**.
2. Press (OK), then press ▲ and ▼ to highlight **Subtitle and Audio**.
3. Press ▼ to select **Subtitle** and use ◀ or ▶ to select **On** or **Off**.




4. Press ▼ to select **Subtitle Type** and use ◀ or ▶ to select **Normal** or **Hard of Hearing**.
5. Press ▼ to select **Primary Subtitle Language** or **Secondary Subtitle Language** and use ◀ or ▶ to select an option.

   The **SUBTITLE** button can also be used to select **On** or **Off**, and to select subtitle language if more than one subtitle is available.

## Audio languages

*This feature allows a programme or film to be viewed with a choice of soundtrack language, provided they are currently being broadcast.*

1. In the **Subtitle and Audio** menu press ▼ to select **Audio Type** and use ◀ or ▶ to select **Normal** or **Hard of Hearing**.
2. Press ▼ to select **Primary Audio Language** or **Secondary Audio Language** and use ◀ or ▶ to select an option.

   If more than one soundtrack is available, use the ◯I/II button to select between them.

## Common Interface

*The Common Interface Slot, situated on the side of the television, enables the insertion of a CAM (Conditional Access Module) and card. These are purchased from a service provider and allow additional subscription broadcasts to be viewed. For information see a service provider.*

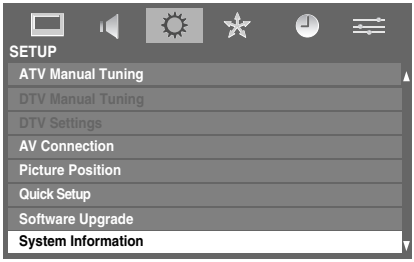
1. Insert the CAM and card into the Common Interface Slot, following the instructions provided with the CAM. A box will appear on screen to confirm that the CAM has been inserted.
2. In the **DTV Settings** menu press ▲ or ▼ to select **Common Interface** and press (OK).
3. Details of the CAM should now be available.

# Software Upgrade

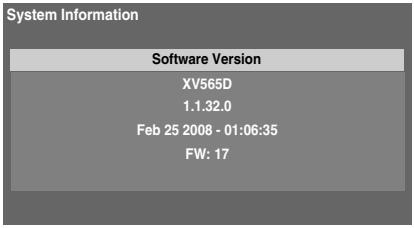
## Version

*This feature can be used to check the version of software currently installed.*

1. From the **SETUP** menu press ▲ or ▼ to select **System Information**.




2. Press (OK) to display the **Software Version**.




## Auto Upgrade

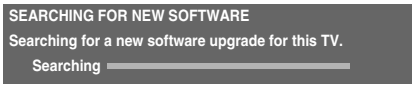
*When* **Auto Upgrade** *is set to* **On** *(default setting), the television will automatically upgrade while in standby if new software is available.*

1. From the **SETUP** menu press ▲ or ▼ to select **Software Upgrade** and press (OK).
2. Press ▼ to select **Auto Upgrade**.
3. Use ◀ or ▶ to select **On** or **Off**.

## Searching for New Software

*If preferred, software upgrades can be searched for manually using* **Search for New Software**.

1. In the **Software Upgrade** menu press ▲ or ▼ to select **Search for New Software**.
2. Press (OK). The television will automatically start searching for a software upgrade, the progress bar will move along the line.

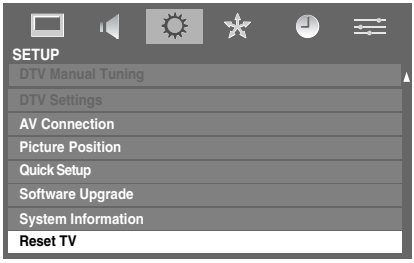



If an upgrade is found the television will automatically start downloading. If not, a screen will appear stating that an upgrade is unavailable.

## Reset TV

*Selecting* **Reset TV** *will reset all TV settings, including stored channels, to their original factory values.*

1. In the **SETUP** menu press ▼ until **Reset TV** is highlighted.




2. Press (OK) to select. A screen will appear warning that all settings will be lost. Press (OK) to continue.

When the set powers back on, the **Quick Setup** screen will appear. Press (OK) to continue, the television will then auto tune. (See 'Quick Setup' section on page 13.)

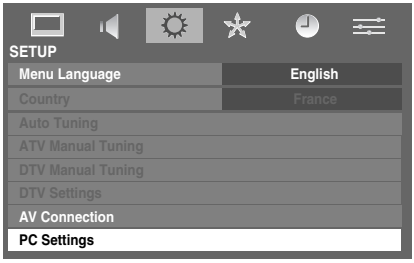
English

# PC settings

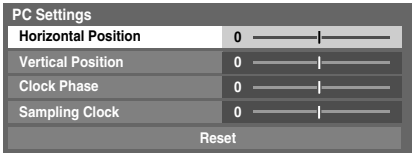
## Horizontal and Vertical Position

*Connect the PC (as shown in the 'Connecting a PC' section) and ensure that a picture is showing on the television screen. The picture position may now be adjusted to suit personal preference.*

1. Press ⊕ to select **PC**, then select **PC Settings** from the **SETUP** menu.




2. Press (OK). Press ▲ and ▼ to select an option, then ◀ or ▶ to adjust the settings.




## Clock Phase

*The* **Clock Phase** *matches the PC signal with the LCD display. Adjusting this can clear horizontal stripes and picture blur.*

1. In the **SETUP** menu press ▼ until **PC Settings** is highlighted.
2. Press (OK) to select, then ▼ to highlight **Clock Phase**.
3. Use ◀ or ▶ to adjust until the picture clears.

## Sampling Clock

*Adjusting the* **Sampling Clock** *alters the number of pulses per scan, this will clear vertical lines on the screen.*

1. In the **SETUP** menu press ▼ until **PC Settings** is highlighted.
2. Press (OK) to select, then ▼ to highlight **Sampling Clock**.
3. Use ◀ or ▶ to adjust until the picture clears.

## Reset

*To return to the original factory settings.*

1. In the **SETUP** menu press ▼ until **PC Settings** is highlighted.
2. Press (OK) to select, then ▼ to highlight **Reset**.
3. Press (OK).

**NOTE: When a PC is connected using HDMI none of these functions will be available.**

The screen is disrupted momentarily when adjusting the PC setting. This is not a sign of malfunction.

The default settings and adjustment ranges may vary depending on the input signal format.

# Input selection and AV connections

See page 8 for a clear view of the back connection recommendations.

Most media recorders and decoders send a signal through the SCART lead to switch the television to the correct *Input* socket.

Alternatively press the external source selection button ⊕ until the picture from connected equipment is shown.

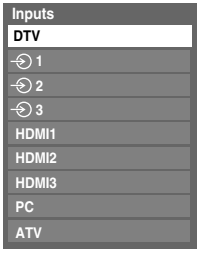
This button must be used to view equipment connected using the COMPONENT VIDEO INPUT (**EXT3**).

An **S** in the display e.g. ⊕**2S** (**EXT 2S**), indicates the input is set for an S-Video signal.

## Input selection

*Use the Input Selection window if the television does not switch over automatically.*

**1** At any time by pressing ⊕ a list will appear on screen showing all inputs and external equipment. Use ▲ and ▼ to highlight an input and (OK) to select.



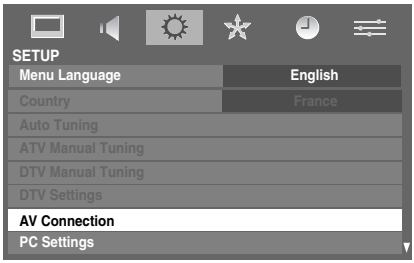

HDMI™ displays equipment connected to *Input HDMI* on the back or side of the television.

PC displays a computer connected to *Input RGB/PC* on the back of the television.

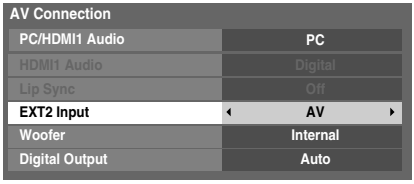
## INPUT signal selection

*This specifies the type of signal going into SCART 2 (**EXT2**) on the back of the television. Please refer to the manufacturer's instructions for the connected equipment.*

**1** In the **SETUP** menu press ▼ until **AV Connection** is highlighted, then press (OK).




**2** With ◀ or ▶ select either **AV** or **S-VIDEO** as the required ***input*** for **EXT2**.




If video colour is absent, try the alternative setting.

English

## PC Audio

*In order to receive sound from a connected PC, plug the audio cable into the back of the television (as shown in 'Connecting a computer' section), then use the* **PC/HDMI1 Audio** *setting.*

1. In the **SETUP** menu press ▼ until **AV Connection** is highlighted, then press (OK).

2. Highlight **PC**/**HDMI1 Audio** then use ▶ to select the **PC** option.

| AV Connection | |
|---|---|
| PC/HDMI1 Audio | ◂ PC ▸ |
| HDMI1 Audio | Digital |
| Lip Sync | Off |
| EXT2 Input | AV |
| Woofer | Internal |
| Digital Output | PCM |

**NOTE:** Selecting the **PC** option will force HDMI1 Audio to Digital mode.

## HDMI1 Audio

*If the connected HDMI source does not support digital audio, plug the audio cable into* **PC/HDMI1 (AUDIO)** *on the back of the television (as shown in the 'Connecting an HDMI™ or DVI device to the HDMI input' section), then use the* **HDMI1 Audio** *setting.*

1. In the **AV Connection** menu press ▼ to highlight **PC/HDMI1 Audio** and using ▶ select **HDMI1**.

2. Then highlight **HDMI1 Audio** and using ◀ or ▶ select **Auto** or **Analogue**.

| AV Connection | |
|---|---|
| PC/HDMI1 Audio | HDMI1 |
| HDMI1 Audio | ◂ Auto ▸ |
| Lip Sync | Off |
| EXT2 Input | AV |
| Woofer | Internal |
| Digital Output | PCM |

If the sound is missing select an alternative setting.

**NOTE:** HDMI1 supports digital and analogue sound, HDMI2 and HDMI3 are digital sound only.

Certain DVD disk formats may not output from this TV (32/44.1/48kHz and 16/20/24 bits are acceptable).

## Lip Sync Latency

**Lip Sync** *can synchronize the sound and picture. This feature is only available for HDMI equipment compatible with Lip Sync.*

**NOTE:** Disconnect the HDMI cable before changing the **Lip Sync** setting. If the HDMI cable is connected, a message will appear.

1. Select the appropriate HDMI input from the input selection window.

2. In the **AV Connection** menu press ▼ to highlight **Lip Sync**.

3. Using ◀ or ▶ select **On** or **Off**.

## Digital Output

*When connecting a surround sound amplifier to the digital audio output (Sony/Philips Digital Interface Format [S/PDIF]), the following options can be selected.*

***PCM:*** *this mode outputs PCM format to the digital audio output socket.*

***Auto:*** *this mode outputs Dolby Digital or PCM to the digital audio output socket providing it is being broadcast.*

Dolby Digital ⟶ Dolby Digital
Dolby Digital Plus ⟶ Dolby Digital
MPEG ⟶ PCM

1. In the **AV Connection** menu press ▼ to select **Digital Output**.

2. Use ◀ or ▶ to select **PCM** or **Auto**.

*HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC.*

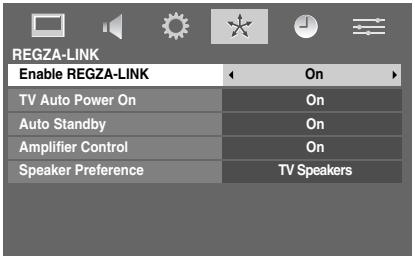
# Using REGZA-LINK

This is a new feature that uses CEC technology and allows you to control Toshiba REGZA-LINK compatible devices from the television remote control via HDMI connection (page 10).

When the **Enable REGZA-LINK** item in the **REGZA-LINK** menu is set to **On**, individual functions also set to **On** will be activated.

## Enable REGZA-LINK

1. Press MENU and ◀ or ▶ to select the **REGZA-LINK** menu.
2. Press ▼ to highlight **Enable REGZA-LINK**, then ◀ or ▶ to select **On**.




**NOTE:** If you set **Enable REGZA-LINK** to **Off**, all other items will be greyed out.

## TV Auto Power On

*The* ***TV Auto Power On*** *setting allows the television to be automatically switched on if a REGZA-LINK device is turned on.*

1. In the **REGZA-LINK** menu press ▼ to highlight **TV Auto Power On**.
2. Press ◀ or ▶ to select **On** or **Off**.

## Auto Standby

*If* ***Auto Standby*** *is enabled, the television, when switched off, will automatically switch off (standby mode) all connected REGZA-LINK equipment.*

1. In the **REGZA-LINK** menu press ▼ to highlight **Auto Standby**.
2. Press ◀ or ▶ to select **On** or **Off**.

## Amplifier Control

*When* ***Amplifier Control*** *is set to* ***On****, it allows the "Speaker Preference" feature to become available.*

1. In the **REGZA-LINK** menu press ▼ to highlight **Amplifier Control**.
2. Press ◀ or ▶ to select **On** or **Off**.

## Speaker Preference

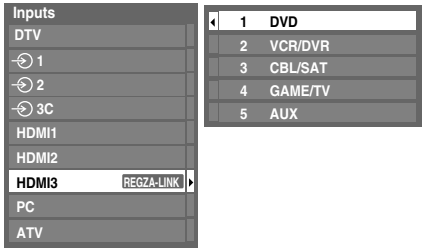
*This feature allows the audio output preference to be set to the TV speakers or AV amplifier speakers. The AV Amplifier option lets the television's remote control adjust or mute the volume of the external audio.*

1. In the **REGZA-LINK** menu press ▼ to highlight **Speaker Preference**.
2. Press ◀ or ▶ to select **TV Speakers** or **Amplifier**.

## REGZA-LINK input source selection

If a REGZA-LINK device with HDMI switching capability (e.g. AV amplifier) is connected to the HDMI input, you can select another REGZA-LINK device that is connected to the master HDMI device from the input source list.

1. Press ⏎ and a list will appear on screen showing the television's inputs and all stored external equipment.
2. Press ▼ to select the desired input source with a REGZA-LINK icon.
3. Press ▶ and a second selection screen will appear showing all connected REGZA-LINK equipment.




4. Press ▲ or ▼ to select the desired input source, and then press OK.

**NOTE:**
- These functions depend on the device connected.
- If you select the REGZA-LINK input source from the popup window, some REGZA-LINK devices may automatically turn on.
- When the television is switched on it will take a few minutes for the REGZA-LINK icon to appear in the list, when an HDMI cable is removed it will take a few minutes for the icon to disappear.
- If the HDMI cable from connected equipment is changed **Enable REGZA-LINK** in the REGZA-LINK setup menu may need to be reset to **On**.
- If you change HDMI leads to connected devices or HDMI device settings, reset the **Enable REGZA-LINK** item in the REGZA-LINK setup menu from **Off** to **On**.



## REGZA-LINK playback device control

With REGZA-LINK mode on your television's remote control, you can control the connected REGZA-LINK playback device you are watching.

To control the REGZA-LINK input source first select the equipment with REGZA-LINK input source selection, then switch the mode on the remote control to **REGZA-LINK** and press any button.

See page 6 for details on available remote control key functions.

**NOTE:** The available functions depend on the equipment connected. Not all the remote control keys may be available. Please refer to the operation manual for each piece of equipment connected.

## REGZA-LINK one touch play

When connected equipment is switched on, REGZA-LINK will automatically switch the television input to the appropriate HDMI input. Also, if the television is in standby, it will be switched on automatically.

These functions can be enabled or disabled from the REGZA-LINK setup (see page 37).

**NOTE:**
- Even if the equipment is only showing a menu, the television may automatically switch to that input source.
- This feature depends on the connected equipment and television state.

## REGZA-LINK system standby

If the television is turned off (standby mode), the television will send a message to turn off (standby mode) all of the REGZA-LINK devices connected to the television.

This function can be enabled or disabled from the REGZA-LINK setup (see page 37).

**NOTE:** This feature depends on the connected equipment and television state.

## REGZA-LINK system audio control

With your television's remote control, you can adjust or mute the sound volume of the speakers connected to the television via an AV amplifier.

1. Set the **Speaker Preference** to **Amplifier** in the **REGZA-LINK** menu.
2. Set the remote control mode switch to REGZA-LINK.
3. Confirm that a connected REGZA-LINK device (such as DVD player, etc) is selected for the AV amplifier input source.

**NOTE:**
- These functions depend on the device connected.
- When you turn on the AV amplifier, change its input source, or adjust the sound volume, the sound will be output from the AV amplifier's speakers even if **TV Speakers** has been selected. Turn the television off and on again to output the sound from the TV Speakers.
- This feature may not work if the AV amplifier is operated.

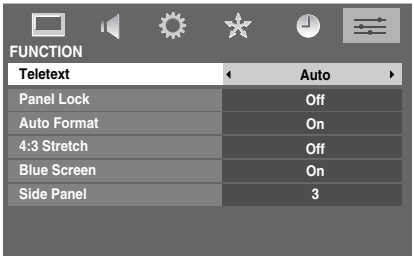
# Text services

This television has a multi-page text memory, which takes a few moments to load. It offers two ***Modes*** of viewing text – **Auto** will display **Fastext**, if available. **List** will store your four favourite pages.

## Selecting modes

*The text character set will be automatically chosen by the language setting in the* **SETUP** *menu.*

1. Select **Teletext** from the **FUNCTION** menu.
2. With ◀ or ▶ choose **Auto** or **List** then press EXIT.




## Text information

**The TEXT button:**

To view text services press **TEXT**. Press again to superimpose the text over a normal broadcast picture and again to return to normal viewing. Channels cannot be changed until text is cancelled.

The first text page shown will be the *initial* page.

Any text page can be accessed by entering the 3 digit page number using the numbered buttons, pressing the coloured buttons or pressing **P**∧ to advance to the next page and **P**∨ to go back to the previous page.

**Sub-pages**

The pages on the screen will dynamically update as sub-pages are received.

To access the sub-pages selector press then use **P**∧ and **P**∨ to view them.

Once selected, the sub-page you are viewing will be highlighted and, as the television loads any additional sub-pages, the colour of the numbers will change, indicating that these pages have been loaded.

These sub-pages will remain available to view until another page is chosen or, in normal TV mode, the channel is changed.

## Navigating pages using Auto

If **Fastext** is available four coloured titles will appear at the base of the screen.

To access one of the four given subjects, press the relevant coloured button on the remote control.

For further information on your particular text system(s), see the broadcast text index page or, consult your local Toshiba dealer.

## Navigating pages using List

The four coloured choices at the bottom of the screen are numbers – 100, 200, 300 and 400, which have been programmed into the television's memory. To view these pages press the relevant coloured buttons.

To change these stored pages press the relevant coloured button and enter the 3 digit number. This number will change in the top left of the screen and in the coloured highlight.

Press OK to store. **Whenever OK is pressed all four page numbers showing at the bottom will be stored and the previous ones will be lost.**

If OK is not pressed the selection will be forgotten when the channel is changed.

Other pages may be viewed by entering the 3 digit page number – but DO NOT press OK or these pages will be stored.

English

## Control buttons

Below is a guide to the functions of the remote control text buttons.

### To display the index/initial page:

Press to access the index/initial page. The one displayed is dependant on the broadcaster.

### TEXT To display a page of text:

Press **TEXT** to display text. Press again to superimpose text over a normal picture. Press again to return to normal television viewing. Channels cannot be changed until this has been done.



### To access sub-pages:

For use with **P**∧ and **P**∨ to view sub-pages when available.

### To reveal concealed text:

To discover the solutions on quiz and joke pages press the button.

### To hold a wanted page:

At times it is convenient to hold a page of text. Press and will appear in the top left of the screen. The page will be held on screen until the button is pressed again.

### To enlarge the text display size:

Press once to enlarge the top half of the page, press again to enlarge the bottom half of the page. Press again to revert to normal size.

### / To select a page whilst viewing normal picture:

Enter the page number then press /, normal picture will be displayed. The television will indicate when the page is ready by changing the colour of the page number at the top of the screen. Press **TEXT** to view the page.

*To display news flashes:*
Select the news flash page for the chosen text service (see the index page of text service). The news flashes will be displayed as and when they are broadcast.

**Remember to cancel text before changing channels - press the TEXT button twice.**

# Questions and Answers

Below are the answers to some of the most common queries.
For more information go to **www.toshiba.co.uk**

**Q** *Why is there no sound or picture?*

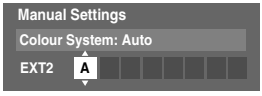
**A** Check the television is not in standby mode. Check the mains plug and all mains connections.

**Q** *There is a picture, but why is there little or no colour?*

**A** When using an **external** source, for instance, a poor quality video tape, if there is little or no colour, improvements may sometimes be achieved. The colour is factory set to **Auto** to automatically display the best colour system.

*To check that you have the best colour:*

**1** With the external source playing, select **Manual Settings** from the **SETUP** menu.




**2** With ▲ or ▼ choose between **Auto**, **PAL**, **SECAM**, **NTSC 4.43** or **NTSC 3.58**.

**Q** *Why doesn't the video/DVD being played show on screen?*

**A** Make sure the VCR or DVD player is connected to the television as shown on page 8, then select the correct input by pressing ⊖.

**Q** *Why is there a picture but no sound?*

**A** Check all lead connections.
No sound or unacceptable format sound may be received.
Check the volume has not been turned down or that sound mute has not been selected.

**Q** *Why is the VCR/DVD picture in black and white?*

**A** Check the correct ***input*** has been chosen, **S-VIDEO** or **AV**. See **AV Connections** on page 35.

**Q** *What else can cause a poor picture?*

**A** Interference or a weak signal. Try a different television station. **Fine Tuning** may help.

**1** Select the **ATV Manual Tuning** menu. Highlight the station and press (OK), then press ▶ to select **Fine Tuning**.

**2** Using ▲ or ▼ adjust to get the best picture and sound. Press (OK) and then (EXIT).

**Q** *Why don't the controls of the television work?*

**A** Check that **Panel Lock** is not **On**.

**Q** *Why doesn't the remote control work?*

**A** Check that the mode switch on the remote control is in TV mode.
Check that the batteries aren't dead or inserted incorrectly.

**Q** *Why is there a message permanently on the screen?*

**A** Remove it by pressing (i+).

**Q** *Why is the* digital *channel locked?*

**A** The channel has been selected in **Locked Channels** (see 'Digital Settings' *section*).

**Q** *Why can only certain* digital *channels be viewed?*

**A** A **Favourite** list has been selected (see '*Favourite Channels*' section), set the feature to **All Channels** or change channels by using the number buttons.

English

**Q** *Why are some of the* digital *subscription channels unavailable?*

**A** Your subscription needs upgrading. Contact your service provider.

**Q** *Why is the soundtrack in English when a different audio language has been selected?*

**A** The programme is currently being broadcast with an English soundtrack only.

**Q** *Why is there incorrect or no sound when in* DTV *mode?*

**A** Press ◯I/II to ensure the hard of hearing option has not been selected.

**Q** *What can be done if the PIN number has been forgotten?*

**A** Use the Master PIN code of 1276, then change to a number of your choice. Ensure that no-one else can use the Master PIN by removing the Owner's Manual.

**Q** *Why are there vertical stripes on the screen when in PC mode?*

**A** The **Sampling Clock** may need adjustment. Select **PC Settings** from the **SETUP** menu, highlight **Sampling Clock** and adjust until the lines clear.

**Q** *Why are there horizontal stripes and/or blurred images on the screen when in PC mode?*

**A** The **Clock Phase** may need adjustment. Select **PC Settings** from the **SETUP** menu, highlight **Clock Phase** and adjust until the picture clears.

**Q** *Why when* digital *subtitles have been selected are they not showing on screen?*

**A** Subtitles are not currently being transmitted by the broadcaster.

**Q** *Why are there problems with analogue text?*

**A** Good performance of text depends on a good strong broadcast signal. This normally requires a roof or loft aerial. If the text is unreadable or garbled, check the aerial. Go to the *main index* page of the text service and look for the *User Guide*. This will explain the basic operation of text in some detail. If further information is needed on how to use text *see the text section*.

**Q** *Why are there no analogue text sub-pages?*

**A** There are none broadcast or they have not yet loaded. Press the ▤ button to access. *(See text section)*.

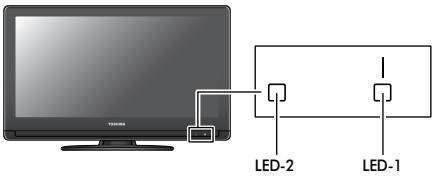
**Q** *Why is a page number visible at the top of the screen but no text?*

**A** Text has been selected but Teletext information is currently unavailable on the current source.

**Q** *Why are the LEDs on the front of the television flashing?*

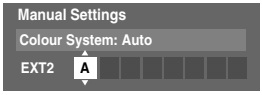
**A** Check the table below.

| LED indication | | Condition | Solution |
|---|---|---|---|
| LED-2 | LED-1 | | |
| OFF | Green (Solid) | The TV is operating properly. | – |
| OFF | Red (Solid) | Standby with Power-On | – |
| Orange (Solid) | Red (Solid) | Programme timer set (Digital mode) | – |
| Red (Solid) | Green (Solid) | Programme timer Active (Digital mode) | – |
| OFF | RED Blinks 0.5 sec cycle | Power protect detection. | Turn OFF the TV and unplug the power cord. Plug the power cord in again and turn ON the TV. |
| OFF | Red Blinks 1 sec cycle | Abnormal operation of BUS line. | |




**Q** *Why are the colours wrong when an NTSC source is played?*

**A** Connect the source via a SCART lead and play.
Select **Manual Settings** from the **SETUP** menu.




**1** Set the Colour to **Auto** and exit.

**2** Go to the **Picture Settings** menu and adjust the tint.

**Q** *Why don't the devices connected via HDMI operate properly?*

**A** Make sure to use cables with the HDMI logo HDMI (see page 9).

Some early HDMI equipment may not work properly with the latest HDMI TV products, due to new standard adoption. Try setting **Lip Sync** to **Off**.

**Q** *Why don't the REGZA-LINK devices work?*

**A** When the connected REGZA-LINK device does not work correctly after you have changed the settings of the device, turn off your television and unplug the power cord, then plug and turn on again.
Unplug the HDMI cable of the REGZA-LINK device and lead again.

**Q** *Why is the REGZA-LINK logo still showing when the equipment has been disconnected?*

**A** If the REGZA-LINK device is disconnected, the logo will disappear after approximately one minute.

English

# Notes

For your own records

English

**Cleaning the screen and cabinet...**

*Turn off the power, clean the screen and cabinet with a soft, dry cloth. We recommend that you **do not** use any proprietary polishes or solvents on the screen or cabinet as this may cause damage.*

**Disposal...**

***The following information is only for EU-member states:***

***Disposal of products***

*The crossed out wheeled dust bin symbol indicates that products must be collected and disposed of separately from household waste. Integrated batteries and accumulators can be disposed of with the product. They will be separated at the recycling centres.*
*The black bar indicates that the product was placed on the market after August 13, 2005.*
*By participating in separate collection of products and batteries, you will help to assure the proper disposal of products and batteries and thus help to prevent potential negative consequences for the environment and human health.*
*For more detailed information about the collection and recycling programmes available in your country, please contact your local city office or the shop where you purchased the product.*

***Disposal of batteries and/or accumulators***

*The crossed out wheeled dust bin symbol indicates that batteries and/or accumulators must be collected and disposed of separately from household waste.*
*If the battery or accumulator contains more than the specified values of lead (Pb), mercury (Hg), and/or cadmium (Cd) defined in the Battery Directive (2006/66/EC), then the chemical symbols for lead (Pb), mercury (Hg) and/or cadmium (Cd) will appear below the crossed out wheeled dust bin symbol.*
*By participating in separate collection of batteries, you will help to assure the proper disposal of products and batteries and thus help to prevent potential negative consequences for the environment and human health.*
*For more detailed information about the collection and recycling programmes available in your country, please contact your local city office or the shop where you purchased the product.*

## For your own records

# Information

***Before connecting any external equipment, turn off all main power switches. If there is no switch, remove the mains plug from the wall socket.***

## Signal information for Mini D-sub 15 pin connector

| Pin No. | Signal name | Pin No. | Signal name | Pin No. | Signal name |
|---|---|---|---|---|---|
| 1 | R | 6 | Ground | 11 | NC |
| 2 | G | 7 | Ground | 12 | NC |
| 3 | B | 8 | Ground | 13 | H-sync |
| 4 | NC* | 9 | NC | 14 | V-sync |
| 5 | NC | 10 | Ground | 15 | NC |

* NC = not connected

## Acceptable PC signals through the PC terminal

| Format | Resolution | V. Frequency | H. Frequency | Pixel Clock Frequency |
|---|---|---|---|---|
| VGA | 640 × 480 | 59.940Hz | 31.469kHz | 25.175MHz |
| | | 72.809Hz | 37.861kHz | 31.500MHz |
| | | 75.000Hz | 37.500kHz | 31.500MHz |
| SVGA | 800 × 600 | 60.317Hz | 37.879kHz | 40.000MHz |
| | | 72.188Hz | 48.077kHz | 50.000MHz |
| | | 75.000Hz | 46.875kHz | 49.500MHz |
| XGA | 1024 × 768 | 60.004Hz | 48.363kHz | 65.000MHz |
| | | 70.069Hz | 56.476kHz | 75.000MHz |
| | | 75.029Hz | 60.023kHz | 78.750MHz |
| WXGA | 1280 × 768 | 59.995Hz | 47.396kHz | 68.250MHz |
| | | 59.870Hz | 47.776kHz | 79.500MHz |
| | | 74.893Hz | 60.289kHz | 102.250MHz |
| | 1360 × 768 | 60.015Hz | 47.712kHz | 85.500MHz |
| SXGA | 1280 × 1024 | 60.020Hz | 63.981kHz | 108.000MHz |

**NOTE:** Depending on the connected PC, one of the following may occur; incorrect display, false format detection, picture position failure, blur, or judder. But this is not a malfunction of your TV.

## Acceptable video or PC signals through the HDMI terminals

| Format | Resolution | V. Frequency | H. Frequency | Pixel Clock Frequency |
|---|---|---|---|---|
| 480i | 720 × 480i | 59.940/60.000Hz | 15.734/15.750kHz | 27.000/27.027MHz |
| 576i | 720 × 576i | 50.000Hz | 15.625kHz | 27.000MHz |
| 480p | 720 × 480p | 59.940/60.000Hz | 31.469/31.500kHz | 27.000/27.027MHz |
| 576p | 720 × 576p | 50.000Hz | 31.250kHz | 27.000MHz |
| 1080i | 1920 × 1080i | 59.940/60.000Hz | 33.716/33.750kHz | 74.176/74.250MHz |
| 1080i | 1920 × 1080i | 50.000Hz | 28.125kHz | 74.250MHz |
| 720p | 1280 × 720p | 59.940/60.000Hz | 44.955/45.000kHz | 74.176/74.250MHz |
| 720p | 1280 × 720p | 50.000Hz | 37.500kHz | 74.250MHz |
| 1080p | 1920 × 1080p | 59.940/60.000Hz | 67.500kHz | 148.500MHz |
| 1080p | 1920 × 1080p | 50.000Hz | 56.250kHz | 148.500MHz |
| 1080p | 1920 × 1080p | 30.000Hz | 33.750kHz | 74.250MHz |
| 1080p | 1920 × 1080p | 25.000Hz | 28.125kHz | 74.250MHz |
| 1080p | 1920 × 1080p | 24.000Hz | 27.000kHz | 74.250MHz |
| VGA | 640 × 480 | 59.940Hz | 31.469kHz | 25.175MHz |
| | | 72.809Hz | 37.861kHz | 31.500MHz |
| | | 75.000Hz | 37.500kHz | 31.500MHz |
| SVGA | 800 × 600 | 60.317Hz | 37.879kHz | 40.000MHz |
| | | 72.188Hz | 48.077kHz | 50.000MHz |
| | | 75.000Hz | 46.875kHz | 49.500MHz |
| XGA | 1024 × 768 | 60.004Hz | 48.363kHz | 65.000MHz |
| | | 70.069Hz | 56.476kHz | 75.000MHz |
| | | 75.029Hz | 60.023kHz | 78.750MHz |
| WXGA | 1280 × 768 | 59.995Hz | 47.396kHz | 68.250MHz |
| | | 59.870Hz | 47.776kHz | 79.500MHz |
| | | 74.893Hz | 60.289kHz | 102.250MHz |
| | 1360 × 768 | 60.015Hz | 47.712kHz | 85.500MHz |
| SXGA | 1280 × 1024 | 60.020Hz | 63.981kHz | 108.000MHz |
| | | 75.025Hz | 79.976kHz | 135.000MHz |

# Specifications and accessories

| DVB-T Broadcast systems/channels | Broadcast systems/channels | |
|---|---|---|
| VHF 05-10 (VHF 01-05)<br>UHF 21-69 | PAL-I | UHF UK21-UK69 |
| | PAL-B/G | UHF E21-E69<br>VHF E2-E12, S1-S41 |
| | SECAM-L | UHF F21-F69<br>VHF F1-F10, B-Q |
| | SECAM-D/K | UHF R21-R69<br>VHF R1-R12 |

**Video Input** PAL, SECAM, NTSC 3.58/4.43

**External connections**

| | | | |
|---|---|---|---|
| EXT1 | Input/Output | 21-pin SCART | RGB, A/V<br>(AV out: TV out) |
| EXT2 | Input/Output | 21-pin SCART | A/V, S-video<br>(AV out: TV out) |
| EXT3 | Input | Phono jacks<br>Phono jacks | Y, $P_B/C_B$, $P_R/C_R$<br>Audio L + R |
| EXT3 | Input (Side) | Phono jack<br>Phono jacks | Video, S-video<br>Audio L + R |
| HDMI 1/2 | Input | HDMI™ (Audio LIP SYNC supported) | |
| HDMI3 | Input (Side) | HDMI™ (Audio LIP SYNC supported) | |
| PC | Input | Mini D-sub 15-pin Analogue RGB signal | |
| PC/HDMI1 Audio | | 3.5mm mini jack | Audio |
| Digital Audio Output (S/PDIF) | | Optical | |
| Output to Active Super Woofer | | Phono jack | |
| Fixed Audio Output | | Phono jacks | Audio L + R |

**Stereo** Nicam
2 carrier system

**Visible Screen Size** (approx.)

| Model | | |
|---|---|---|
| 32 | 80cm | |
| 37 | 94cm | |
| 42 | 107cm | |
| 46 | 117cm | |
| 52 | 132cm | |

**Display** 16:9

**Sound output** (at 10% distortion) Main 10W + 10W

**Power consumption** as specified in EN60107-1 : 1997

| Model | |
|---|---|
| 32 | 168W |
| 37 | 172W |
| 42 | 203W |
| 46 | 269W |
| 52 | 315W |

**Standby** (approx.)

| Model | |
|---|---|
| 32 | 0.8W |
| 37 | 0.8W |
| 42 | 0.8W |
| 46 | 0.8W |
| 52 | 0.8W |

**Dimensions** (approx.)

| Model | |
|---|---|
| 32 | 57cm (H) 79cm (W) 25cm (D) |
| 37 | 63cm (H) 90cm (W) 25cm (D) |
| 42 | 69cm (H) 101cm (W) 26cm (D) |
| 46 | 75cm (H) 111cm (W) 31cm (D) |
| 52 | 84cm (H) 125cm (W) 33cm (D) |

*(Height dimension includes foot stand)*

**Weight** (approx.)

| Model | |
|---|---|
| 32 | 14.0kg |
| 37 | 17.5kg |
| 42 | 23.0kg |
| 46 | 27.5kg |
| 52 | 37.0kg |

**Headphone socket** 3.5mm stereo

**Operating condition** Temperature 5°C - 35°C (41°F - 94°F)
Humidity 20% - 80% (non-condensing)

**Accessories** Remote control
2 batteries
(AAA, IEC R03 1.5V)
Clip
Cleaning cloth (to clean the cabinet and control panel)

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| glibc<br>gcc | Exhibit B |
| malloc | Exhibit C |
| JPEG | Exhibit D |
| FreeType | Exhibit E |
| ICU | Exhibit F |

# Exhibit A

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* VERSION 2.7.2 Sat Aug 17 09:07:30 2002 Doug Lea (dl at gee)

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